

Doc. Ref. **FP56 (7 of 7)**
Appl. No. 10/553,685

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<212> PRT

<213> Homo sapiens

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4673

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<213> Homo sapiens

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1920
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1980
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2040

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 2160
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 2280
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<210> 5496

<211> 345

<212> PRT

<213> Homo sapiens

<400> 5496

Met	Leu	Trp	Lys	Arg	Arg	Leu	Gly	Cys	Lys	Phe	Pro	Gly	Arg	Leu	Ser	1	5	10	15
Met	Phe	Ile	Pro	Asn	Ser	Gln	Trp	Thr	Glu	Val	Ser	Trp	Phe	Leu	Gly	20	25	30	
Leu	Leu	Gly	Ser	Met	Ala	Leu	Ser	Asn	His	Tyr	Arg	Ser	Glu	Asp	Leu	35	40	45	
Leu	Asp	Val	Asp	Thr	Ala	Ala	Gly	Gly	Phe	Gln	Gln	Arg	Gln	Gly	Leu	50	55	60	
Lys	Tyr	Cys	Leu	Pro	Leu	Thr	Phe	Cys	Ile	His	Thr	Gly	Leu	Ser	Gln	65	70	75	80
Tyr	Ile	Ala	Val	Glu	Ala	Ala	Glu	Gly	Arg	Asn	Lys	Asn	Glu	Val	Phe	85	90	95	
Tyr	Gln	Cys	Pro	Asp	Gln	Met	Ala	Arg	Asn	Pro	Ala	Ala	Ile	Asp	Met	100	105	110	
Phe	Ile	Ile	Gly	Ala	Thr	Phe	Thr	Asp	Trp	Phe	Thr	Ser	Tyr	Val	Lys	115	120	125	
Asn	Val	Val	Ser	Gly	Gly	Phe	Pro	Ile	Ile	Arg	Asp	Gln	Ile	Phe	Arg	130	135	140	
Tyr	Val	His	Asp	Pro	Glu	Cys	Val	Ala	Thr	Thr	Gly	Asp	Ile	Thr	Val	145	150	155	160
Ser	Val	Ser	Thr	Ser	Phe	Leu	Pro	Glu	Leu	Ser	Ser	Val	His	Pro	Pro	165	170	175	
His	Tyr	Phe	Phe	Thr	Tyr	Arg	Ile	Arg	Ile	Glu	Met	Ser	Lys	Asp	Ala	180	185	190	
Leu	Pro	Glu	Lys	Ala	Cys	Gln	Leu	Asp	Ser	Arg	Tyr	Trp	Arg	Ile	Thr	195	200	205	
Asn	Ala	Lys	Gly	Asp	Val	Glu	Val	Gln	Gly	Pro	Gly	Val	Val	Gly		210	215	220	
Glu	Phe	Pro	Ile	Ile	Ser	Pro	Gly	Arg	Val	Tyr	Glu	Tyr	Thr	Ser	Cys	225	230	235	240
Thr	Thr	Phe	Ser	Thr	Thr	Ser	Gly	Tyr	Met	Glu	Gly	Tyr	Tyr	Thr	Phe	245	250	255	
His	Phe	Leu	Tyr	Phe	Lys	Asp	Lys	Ile	Phe	Asn	Val	Ala	Ile	Pro	Arg				

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<400> 5497
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180
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240
aagactttca atagtaatga agaattccatg gcactctcct caccctcaaa cacatggcag
300
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360
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420
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480
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540
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660
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720
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960
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1056

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<210> 5498
 <211> 150
 <212> PRT
 <213> Homo sapiens

<400> 5498
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 His Pro Pro Ala Phe Ala Pro Arg Thr Leu Arg Met Ala Gln Leu Val
 20 25 30
 Ala Gln Leu Trp Trp Ser Ser Pro Phe Ile His Ser Pro Gly Glu Thr
 35 40 45
 Asn Ile Pro His Thr Leu Thr Glu Pro His Ser Val Pro Gly Trp Cys
 50 55 60
 Trp Asp Thr Leu Arg Arg His Gly Ala Gly Gln Gly His Pro Gly Met
 65 70 75 80
 Ala Arg Ser Gly Thr Gly Glu Gly Gln Arg Glu Gly Asp Ile Glu Arg
 85 90 95
 Glu Glu Asp Glu Glu Glu Gly Asn Arg Ser Arg Lys Ser Arg Asp Ser
 100 105 110
 Arg Ser Gln Val Lys Gly Leu Pro Leu His Ser Arg Glu Gln Arg Asp
 115 120 125
 Pro Ser Ala Gly Ala Ser Glu Lys Ser Arg Asn Pro Ser Arg Met Gly
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 Thr Trp Gly Val Asn Phe
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<210> 5499
 <211> 1918
 <212> DNA
 <213> Homo sapiens

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 720
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 780
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 1918

<210> 5500

<211> 426

<212> PRT

<213> Homo sapiens

<400> 5500

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Val	Leu	Leu	Glu	Pro	Phe	Val	His	Gln	Val	Gly	Gly	His	Ser	Cys	Val

20 25 30
 Leu Arg Phe Asn Glu Thr Thr Leu Cys Lys Pro Leu Val Pro Arg Glu
 35 40 45
 His Gln Phe Tyr Glu Thr Leu Pro Ala Glu Met Arg Lys Phe Thr Pro
 50 55 60
 Gln Tyr Lys Gly Val Val Ser Val Arg Phe Glu Glu Asp Glu Asp Arg
 65 70 75 80
 Asn Leu Cys Leu Ile Ala Tyr Pro Leu Lys Gly Asp His Gly Ile Val
 85 90 95
 Asp Ile Ala His Asn Ser Asp Cys Glu Pro Lys Ser Lys Leu Leu Arg
 100 105 110
 Trp Thr Thr Asn Lys Lys His His Val Leu Glu Thr Glu Lys Thr Pro
 115 120 125
 Lys Asp Trp Val Arg Gln His Arg Lys Glu Glu Lys Met Lys Ser His
 130 135 140
 Lys Leu Glu Glu Glu Phe Glu Trp Leu Lys Lys Ser Glu Val Leu Tyr
 145 150 155 160
 Tyr Thr Val Glu Lys Lys Gly Asn Ile Ser Ser Gln Leu Lys His Tyr
 165 170 175
 Asn Pro Trp Ser Met Lys Cys His Gln Gln Gln Leu Gln Arg Met Lys
 180 185 190
 Glu Asn Ala Lys His Arg Asn Gln Tyr Lys Phe Ile Leu Leu Glu Asn
 195 200 205
 Leu Thr Ser Arg Tyr Glu Val Pro Cys Val Leu Asp Leu Lys Met Gly
 210 215 220
 Thr Arg Gln His Gly Asp Asp Ala Ser Glu Glu Lys Ala Ala Asn Gln
 225 230 235 240
 Ile Arg Lys Cys Gln Gln Ser Thr Ser Ala Val Ile Gly Val Xaa Val
 245 250 255
 Cys Gly Met Gln Val Tyr Gln Ala Gly Ser Gly Gln Leu Met Phe Met
 260 265 270
 Asn Lys Tyr His Gly Arg Lys Leu Ser Val Gln Gly Phe Lys Glu Ala
 275 280 285
 Leu Phe Gln Phe Phe His Asn Gly Arg Tyr Leu Arg Arg Glu Leu Leu
 290 295 300
 Gly Pro Val Leu Lys Lys Leu Thr Glu Leu Lys Ala Val Leu Glu Arg
 305 310 315 320
 Gln Glu Ser Tyr Arg Phe Tyr Ser Ser Ser Leu Leu Val Ile Tyr Asp
 325 330 335
 Gly Lys Glu Arg Pro Glu Val Val Leu Asp Ser Asp Ala Glu Asp Leu
 340 345 350
 Glu Asp Leu Ser Glu Glu Ser Ala Asp Glu Ser Ala Gly Ala Tyr Ala
 355 360 365
 Tyr Lys Pro Ile Gly Ala Ser Ser Val Asp Val Arg Met Ile Asp Phe
 370 375 380
 Ala His Thr Thr Cys Arg Leu Tyr Gly Glu Asp Thr Val Val His Glu
 385 390 395 400
 Gly Gln Asp Ala Gly Tyr Ile Phe Gly Leu Gln Ser Leu Ile Asp Ile
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 Val Thr Glu Ile Ser Glu Glu Ser Gly Glu
 420 425

<210> 5501

<211> 568

<212> DNA

<213> Homo sapiens

<400> 5501

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 300
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 360
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 420
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<210> 5502

<211> 110

<212> PRT

<213> Homo sapiens

<400> 5502

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Glu	Ala	Gly	Thr	Lys	Pro	Cys	Ser	Ser	Glu	Val	Pro	Val	Gly	Ala	Gly
			20					25					30		
Gly	Ala	Ala	Leu	Gln	Val	Leu	Ala	His	Ala	Gln	Gln	Ala	Pro	His	Ser
			35				40					45			
Phe	Val	Thr	Thr	Lys	Gly	Thr	Val	Leu	Phe	Thr	Ala	Pro	Pro	Ala	Ser
		50				55				60					
Ala	Trp	Gln	Leu	Cys	Leu	Pro	Val	Leu	Tyr	Leu	Ile	Pro	Pro	Ala	Lys
65					70				75					80	
Leu	Ala	Arg	Gln	Gly	Pro	Ala	Leu	Lys	Glu	Ile	Ser	Leu	Pro	Asp	Pro
			85					90					95		
Trp	Thr	Trp	Lys	Trp	Arg	Leu	His	Val	Pro	Ala	Leu	Ala	Ala		
			100					105					110		

<210> 5503

<211> 1679

<212> DNA

<213> Homo sapiens

<400> 5503

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180
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480
tgcccgcccc ccgctccag ggctcccccac aaagacagaa ctctagcccg ctccaggccc
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720
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1560
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1679

<210> 5504
 <211> 392
 <212> PRT
 <213> Homo sapiens

<400> 5504
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 35 40 45
 Ser Gly Glu Ala Thr Gly Ala Asp Ala Gly Arg Leu Cys Pro Pro Pro
 50 55 60
 Arg Ser Arg Ala Pro His Lys Asp Arg Thr Leu Ala Arg Ser Arg Pro
 65 70 75 80
 Gln Thr Gln Gly Glu Asp Cys Ser Leu Pro Val Gly Glu Val Lys Ile
 85 90 95
 Gly Lys Arg Ser Tyr Ser Pro Ala Pro Gly Lys Gln Lys Lys Pro Asn
 100 105 110
 Ala Met Gly Leu Ala Pro Thr Ser Pro Gly Ala Pro Asn Ser Ala
 115 120 125
 Arg Ala Thr His Asn Pro Val Pro Cys Gly Ser Gly Arg Gly Pro Cys
 130 135 140
 His Leu Ala Asn Leu Leu Ser Thr Leu Ala Gln Ser Asn Gln Asn Arg
 145 150 155 160
 Asp His Lys Gln Gly Pro Pro Glu Val Thr Cys Gln Ile Arg Lys Lys
 165 170 175
 Thr Arg Thr Leu Tyr Arg Ser Asp Gln Leu Glu Glu Leu Glu Lys Ile
 180 185 190
 Phe Gln Glu Asp His Tyr Pro Asp Ser Asp Lys Arg Arg Glu Ile Ala
 195 200 205
 Gln Thr Val Gly Val Thr Pro Gln Arg Ile Met Val Lys Gly Ala Gly
 210 215 220
 Ser Leu Val Ala Gly Trp Ser Gly Gly Gly Pro Thr Ile Glu Thr Leu
 225 230 235 240
 Glu Leu Gln Ser Glu Arg Ser Ala Val Ala Trp Val Trp Phe Gln Asn
 245 250 255
 Arg Arg Ala Lys Trp Arg Lys Met Glu Lys Leu Asn Gly Lys Glu Ser
 260 265 270
 Lys Asp Asn Pro Ala Ala Pro Gly Pro Ala Ser Ser Gln Cys Ser Ser
 275 280 285
 Ala Ala Glu Ile Leu Pro Ala Val Pro Met Glu Pro Lys Pro Asp Pro
 290 295 300
 Phe Pro Gln Glu Ser Pro Leu Asp Thr Phe Pro Glu Pro Pro Met Leu
 305 310 315 320
 Leu Thr Ser Asp Gln Thr Leu Ala Pro Thr Gln Pro Ser Glu Gly Ala
 325 330 335
 Gln Arg Val Val Thr Pro Pro Leu Phe Ser Pro Pro Pro Val Arg Arg
 340 345 350
 Ala Asp Leu Pro Phe Pro Leu Gly Pro Val His Thr Pro Gln Leu Met
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 Pro Leu Leu Met Asp Val Ala Gly Ser Asp Ser Ser His Lys Asp Gly

370 375 380
 Pro Cys Gly Ser Trp Gly Thr Arg
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<210> 5505
 <211> 1099
 <212> DNA
 <213> Homo sapiens

<400> 5505
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 240
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<210> 5506
 <211> 280
 <212> PRT
 <213> Homo sapiens

<400> 5506

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 35 40 45
 Arg Gln Leu Leu Leu Asn Cys Arg Leu Val Cys Ser Leu Trp Arg Asp
 50 55 60
 Leu Ile Asp Leu Val Thr Leu Trp Lys Arg Lys Cys Leu Arg Glu Gly
 65 70 75 80
 Phe Ile Thr Glu Asp Trp Asp Gln Pro Val Ala Asp Trp Lys Ile Phe
 85 90 95
 Tyr Phe Leu Arg Ser Leu His Arg Asn Leu Leu His Asn Pro Cys Ala
 100 105 110
 Glu Glu Gly Phe Glu Phe Trp Ser Leu Asp Val Asn Gly Gly Asp Glu
 115 120 125
 Trp Lys Val Glu Asp Leu Ser Arg Asp Gln Arg Lys Glu Phe Pro Asn
 130 135 140
 Asp Gln Val Lys Lys Tyr Phe Val Thr Ser Tyr Tyr Thr Cys Leu Lys
 145 150 155 160
 Ser Gln Val Val Asp Leu Lys Ala Glu Gly Tyr Trp Glu Glu Leu Leu
 165 170 175
 Asp Thr Phe Arg Pro Asp Ile Val Val Lys Asp Trp Phe Ala Ala Arg
 180 185 190
 Ala Asp Cys Gly Cys Thr Tyr Gln Leu Lys Val Gln Leu Leu Ser Ala
 195 200 205
 Asp Tyr Phe Val Leu Ala Ser Phe Glu Pro Asp Pro Ala Thr Ile Gln
 210 215 220
 Gln Lys Ser Asp Ala Lys Trp Arg Glu Val Ser His Thr Phe Ser Asn
 225 230 235 240
 Tyr Pro Pro Gly Val Arg Tyr Ile Trp Phe Gln His Gly Gly Val Asp
 245 250 255
 Thr His Tyr Trp Ala Gly Trp Tyr Gly Pro Arg Val Thr Asn Ser Ser
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 Ile Thr Ile Gly Pro Pro Leu Pro
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<210> 5507

<211> 1658

<212> DNA

<213> Homo sapiens

<400> 5507

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 240
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<210> 5508

<211> 448

<212> PRT

<213> Homo sapiens

<400> 5508

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Thr Pro Ser Asp Phe Asp Gln Leu Lys Gln Phe Leu Thr Phe Asp Lys			
35	40	45	
Gln Val Leu Arg Phe Tyr Ala Ile Trp Asp Asp Thr Asp Ser Met Tyr			
50	55	60	
Gly Glu Cys Arg Thr Tyr Ile Ile His Tyr Tyr Leu Met Asp Asp Thr			
65	70	75	80
Val Glu Ile Arg Glu Val His Glu Arg Asn Asp Gly Arg Asp Pro Phe			
85	90	95	
Pro Leu Leu Met Asn Arg Gln Arg Val Pro Lys Val Leu Val Glu Asn			
100	105	110	
Ala Lys Asn Phe Pro Gln Cys Val Leu Glu Ile Ser Asp Gln Glu Val			
115	120	125	
Leu Glu Trp Tyr Thr Ala Lys Asp Phe Ile Val Gly Lys Ser Leu Thr			
130	135	140	
Ile Leu Gly Arg Thr Phe Phe Ile Tyr Asp Cys Asp Pro Phe Thr Arg			
145	150	155	160
Arg Tyr Tyr Lys Glu Lys Phe Gly Ile Thr Asp Leu Pro Arg Ile Asp			
165	170	175	
Val Ser Lys Arg Glu Pro Pro Pro Val Lys Gln Glu Leu Pro Pro Tyr			
180	185	190	
Asn Gly Phe Gly Leu Val Glu Asp Ser Ala Gln Asn Cys Phe Ala Leu			
195	200	205	
Ile Pro Lys Ala Pro Lys Lys Asp Val Ile Lys Met Leu Val Asn Asp			
210	215	220	
Asn Lys Val Leu Arg Tyr Leu Ala Val Leu Glu Ser Pro Ile Pro Glu			
225	230	235	240
Asp Lys Asp Arg Arg Phe Val Phe Ser Tyr Phe Leu Ala Thr Asp Met			
245	250	255	
Ile Ser Ile Phe Glu Pro Pro Val Arg Asn Ser Gly Ile Ile Gly Gly			
260	265	270	
Lys Tyr Leu Gly Arg Thr Lys Val Val Lys Pro Tyr Ser Thr Val Asp			
275	280	285	
Asn Pro Val Tyr Tyr Gly Pro Ser Asp Phe Phe Ile Gly Ala Val Ile			
290	295	300	
Glu Val Phe Gly His Arg Phe Ile Ile Leu Asp Thr Asp Glu Tyr Val			
305	310	315	320
Leu Lys Tyr Met Glu Ser Asn Ala Ala Gln Tyr Ser Pro Glu Ala Leu			
325	330	335	
Ala Ser Ile Gln Asn His Val Arg Lys Arg Glu Ala Pro Ala Pro Glu			
340	345	350	
Ala Glu Ser Lys Gln Thr Glu Lys Asp Pro Gly Val Gln Glu Leu Glu			
355	360	365	
Ala Leu Ile Asp Thr Ile Gln Lys Gln Leu Lys Asp His Ser Cys Lys			
370	375	380	
Asp Asn Ile Arg Glu Ala Phe Gln Ile Tyr Asp Lys Glu Ala Ser Gly			
385	390	395	400
Tyr Val Asp Arg Asp Met Phe Phe Lys Ile Cys Glu Ser Leu Asn Val			
405	410	415	
Pro Val Asp Asp Ser Leu Val Lys Glu Leu Ile Arg Met Cys Ser His			
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435

440

445

<210> 5509

<211> 818

<212> DNA

<213> Homo sapiens

<400> 5509

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120ctatgtgaga ggaagtaagt atacacagcg taagaggtgt gataaccaag tcatagaaga
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<210> 5510

<211> 105

<212> PRT

<213> Homo sapiens

<400> 5510

Met Trp Leu Ser Thr Ser Pro Tyr Arg Lys Gly Ser Gln Cys Gly Glu
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20 25 30Gly Val Lys Pro Pro Glu Ser His Val Cys Gly Glu Val Gly Val Gly
35 40 45Tyr Pro Ser Thr Glu Arg His Ile Arg Asp Arg Leu Gly Arg Lys Pro
50 55 60Cys Glu Tyr Gln Glu Cys Arg Gln Lys Ala Tyr Thr Cys Lys Pro Cys
65 70 75 80

Gly Asn Ala Phe Arg Phe His His Ser Phe His Ile His Glu Arg Pro

85 90 95
 His Ser Gly Glu Asn Leu Tyr Glu Cys
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<210> 5511
 <211> 379
 <212> DNA
 <213> Homo sapiens

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 tcttgagctt caagcccaa ggcagagacc tggctgctcc tcatgggagc ctcagggata
 240
 atgctgaatt cctctatggc agagatggga ggagaggctc cacgctgggc ctctcagcc
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<210> 5512
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 5512
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 20 25 30
 Val Ser Ala Leu Gly Leu Glu Ala Gln Glu Asp Glu Asp Pro Ser Tyr
 35 40 45
 Lys Trp Arg Glu Glu His Arg Leu Ser Ala Thr Gln Gln Ser Glu Leu
 50 55 60
 Arg Asp Val Cys Asp Tyr Ala Ile Glu Thr Met Pro Ser Phe Pro Lys
 65 70 75 80
 Glu Gly Ser Ala Asp Val Glu Pro Asn Gln Glu Ser Leu Val Ala Glu
 85 90 95
 Ala Cys Asp Thr Pro
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<210> 5513
 <211> 837
 <212> DNA
 <213> Homo sapiens

<400> 5513
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120
agactcgggg agccattgac catcgtctct gaggatggag actggtggac ggtgctgtct
180
gaagtctcag gcagagagta taacatcccc agcgtccacg tggccaaagt ctcccatggg
240
tggtctgtatg agggcctgag caggagagaaa gcagaggacc tgctgttgtt acctgggaac
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360
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420
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480
gaccattact ctgagctggc ggatgacatc tgctgcctac tcaaggagcc ctgtgtcctg
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720
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837

<210> 5514

<211> 248

<212> PRT

<213> Homo sapiens

<400> 5514

Xaa Ser Leu Ser Ser Ser Val Gln Gly Gln Gly Pro Val Thr Met Glu
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20 25 30
Gly Gly Pro Ala Glu Leu Ser Leu Arg Leu Gly Glu Pro Leu Thr Ile
35 40 45
Val Ser Glu Asp Gly Asp Trp Trp Thr Val Leu Ser Glu Val Ser Gly
50 55 60
Arg Glu Tyr Asn Ile Pro Ser Val His Val Ala Lys Val Ser His Gly
65 70 75 80
Trp Leu Tyr Glu Gly Leu Ser Arg Glu Lys Ala Glu Asp Leu Leu Leu
85 90 95
Leu Pro Gly Asn Pro Gly Gly Ala Phe Leu Ile Arg Glu Ser Gln Thr
100 105 110
Arg Arg Gly Ser Tyr Ser Leu Ser Val Arg Leu Ser Arg Pro Ala Ser
115 120 125
Trp Asp Arg Ile Arg His Tyr Arg Ile His Cys Leu Asp Asn Gly Trp
130 135 140
Leu Tyr Ile Ser Pro Arg Leu Thr Phe Pro Ser Leu Gln Ala Leu Val
145 150 155 160
Asp His Tyr Ser Glu Leu Ala Asp Asp Ile Cys Cys Leu Leu Lys Glu

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                165                170                175
Pro Cys Val Leu Gln Arg Ala Gly Pro Leu Pro Gly Lys Asp Ile Pro
                180                185                190
Leu Pro Val Thr Val Gln Arg Thr Pro Leu Asn Trp Lys Glu Leu Asp
                195                200                205
Ser Ser Leu Leu Phe Ser Glu Ala Ala Thr Gly Glu Glu Ser Leu Leu
                210                215                220
Ser Glu Gly Leu Arg Glu Ser Leu Ser Phe Tyr Ile Ser Leu Asn Asp
225                230                235                240
Glu Ala Val Ser Leu Asp Asp Ala
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<210> 5515
 <211> 420
 <212> DNA
 <213> Homo sapiens

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<400> 5515
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120
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180
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240
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420

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<210> 5516
 <211> 120
 <212> PRT
 <213> Homo sapiens

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<400> 5516
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Lys Lys Met Gln Glu Arg Met Ser Ala Gln Leu Ala Ala Ala Glu Ser
20          25          30
Arg Gln Lys Lys Leu Glu Met Glu Lys Leu Gln Leu Gln Ala Leu Glu
35          40          45
Gln Glu His Lys Lys Leu Ala Ala Arg Leu Glu Glu Glu Arg Gly Lys
50          55          60
Asn Lys Gln Val Val Leu Met Leu Val Lys Glu Cys Lys Gln Leu Ser
65          70          75          80
Ser Lys Val Ile Glu Ala Gln Lys Leu Glu Asp Val Met Ala Lys
85          90          95
Leu Ala Ser Ser Leu Cys His Gln His Leu Leu His Ser Leu Ser Gly
100         105         110
Val Pro Gly Thr Gly His Ile Asp

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115

120

<210> 5517
 <211> 804
 <212> DNA
 <213> Homo sapiens

<400> 5517
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 180
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 240
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 300
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 360
 ggtagagcat gaatgcagc atattatacc atcaagatgt tcttagagca gtgtatggat
 420
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 480
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 660
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 780
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 804

<210> 5518
 <211> 85
 <212> PRT
 <213> Homo sapiens

<400> 5518
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 Glu Leu Ser Ser Val Leu Tyr Cys Cys Asp Leu Leu Ile Gly Ile Gly
 20 25 30
 Ile Val Val Gly Ser Ser Asp Arg Ile Arg Ala Ser Ser Leu Gln Val
 35 40 45
 Gln Lys Gln Phe Lys Thr Leu Met Ile Ala Leu Gln Gln Pro Thr His
 50 55 60
 Gly Asp Met Val Ile Val Pro Thr Cys Cys Ser Val Ile Cys Arg Ala
 65 70 75 80
 Ser Asp Trp Phe Lys

85

<210> 5519
 <211> 401
 <212> DNA
 <213> Homo sapiens

<400> 5519
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 120
 ccattgcgct cactacttac catgttcctg cgggcattcc cctcccgaag ggagtctctg
 180
 aaaacaaaca cacacagaag ttggcgctgg gcaccacatt ctctcttga cctaaccatc
 240
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 300
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<210> 5520
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 5520
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 Trp His Ser Lys Phe Leu Met Val Arg Ser Arg Gly Glu Cys Gly Ala
 20 25 30
 Gln Arg Gln Leu Leu Cys Val Phe Val Phe Arg Asp Ser Leu Arg Glu
 35 40 45
 Gly Asn Ala Arg Arg Asn Met Val Ser Ser Glu Ala His Gly Cys Phe
 50 55 60
 Leu Arg Pro Ala Val Phe Tyr Ala Thr Tyr Pro Cys Thr Ser Tyr Ala
 65 70 75 80
 Lys Glu Thr Lys Pro Ser Ala Cys Leu Phe Pro Leu Leu Ile Ile Gly
 85 90 95
 Lys Trp Met Leu Trp
 100

<210> 5521
 <211> 2524
 <212> DNA
 <213> Homo sapiens

<400> 5521
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 120

acagacgcat cgtttctttt ttaatactcc ctaagaaagg gaataacctt caagctggcg
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360
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420
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480
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540
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1740

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 2340
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<210> 5522
 <211> 441
 <212> PRT
 <213> Homo sapiens

<400> 5522
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 Ser Ser Lys Asn Val Arg Val Asn Cys Leu Asp Glu Asn Gly Met Thr
 35 40 45
 Pro Leu Met His Ala Ala Tyr Lys Gly Lys Leu Asp Met Cys Lys Leu
 50 55 60
 Leu Leu Arg His Gly Ala Asp Val Asn Cys His Gln His Glu His Gly
 65 70 75 80
 Tyr Thr Ala Leu Met Phe Ala Ala Leu Ser Gly Asn Lys Asp Ile Thr
 85 90 95
 Trp Val Met Leu Glu Ala Gly Ala Glu Thr Asp Val Val Asn Ser Val
 100 105 110
 Gly Arg Thr Ala Ala Gln Met Ala Ala Phe Val Gly Gln His Asp Cys
 115 120 125
 Val Thr Ile Ile Asn Asn Phe Phe Pro Arg Glu Arg Leu Asp Tyr Tyr
 130 135 140
 Thr Lys Pro Gln Gly Leu Asp Lys Glu Pro Lys Leu Pro Pro Lys Leu

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<210> 5523
<211> 6190
<212> DNA
<213> Homo sapiens
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<211> 1193

<212> PRT

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 5528

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<212> DNA

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<213> Homo sapiens

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Arg	Thr	Val	Leu	Ile	His	Cys	Pro	Glu	Lys	Ile	Ser	Glu	Asn	Lys	Phe
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<210> 5536

<211> 306

<212> PRT

<213> Homo sapiens

<400> 5536

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Pro Gly Glu Thr Pro Lys His Gln Pro Gly Ser Pro Arg Gly Ser Gly
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Arg Glu Glu Asp Asp Glu Leu Leu Gly Asn Asp Asp Ser Asp Lys Thr
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Glu Leu Leu Ala Gly Gln Lys Lys Ser Ser Pro Phe Trp Thr Phe Glu
65              70              75              80
Tyr Tyr Gln Thr Phe Phe Asp Val Asp Thr Tyr Gln Val Phe Asp Arg
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Ile Lys Gly Ser Leu Leu Pro Ile Pro Gly Lys Asn Phe Val Arg Leu
      100             105             110
Tyr Ile Arg Ser Asn Pro Asp Leu Tyr Gly Pro Phe Trp Ile Cys Ala
      115             120             125
Thr Leu Val Phe Ala Ile Ala Ile Ser Gly Asn Leu Ser Asn Phe Leu
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Ile His Leu Gly Glu Lys Thr Tyr His Tyr Val Pro Glu Phe Arg Lys
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Val Ser Ile Ala Ala Thr Ile Ile Tyr Ala Tyr Ala Trp Leu Val Pro
      165             170             175
Leu Ala Leu Trp Gly Phe Leu Met Trp Arg Asn Ser Lys Val Met Asn
      180             185             190
Ile Val Ser Tyr Ser Phe Leu Glu Ile Val Cys Val Tyr Gly Tyr Ser
      195             200             205
Leu Phe Ile Tyr Ile Pro Thr Ala Ile Leu Trp Ile Ile Pro Gln Lys
      210             215             220
Ala Val Arg Trp Ile Leu Val Met Ile Ala Leu Gly Ile Ser Gly Ser
225             230             235             240
Leu Leu Ala Met Thr Phe Trp Pro Ala Val Arg Glu Asp Asn Arg Arg
      245             250             255
Val Ala Leu Ala Thr Ile Val Thr Ile Val Leu Leu His Met Leu Leu
      260             265             270
Ser Val Gly Cys Leu Ala Tyr Phe Phe Asp Ala Pro Glu Met Asp His
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<210> 5537

<211> 2881

<212> DNA

<213> Homo sapiens

<400> 5537

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<210> 5538

<211> 352

<212> PRT

<213> Homo sapiens

<400> 5538

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			20					25					30		
Ala	Glu	Leu	Arg	His	Leu	Asp	Thr	Gln	Val	Gln	Arg	Cys	Glu	Asp	Ile
			35				40					45			
Leu	Gln	Gln	Leu	Gln	Ala	Val	Val	Pro	Gln	Ile	Asp	Met	Glu	Gly	Asp

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Arg Asn Ile Trp Ile Val Lys Pro Gly Ala Lys Ser Arg Gly Arg Gly		
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Ile Met Cys Met Asp His Leu Glu Glu Met Leu Lys Leu Val Asn Gly		80
	85	90
Asn Pro Val Val Met Lys Asp Gly Lys Trp Val Val Gln Lys Tyr Ile		95
	100	105
Glu Arg Pro Leu Leu Ile Phe Gly Thr Lys Phe Asp Leu Arg Gln Trp		110
	115	120
Phe Leu Val Thr Asp Trp Asn Pro Leu Thr Val Trp Phe Tyr Arg Asp		125
	130	135
Ser Tyr Ile Arg Phe Ser Thr Gln Pro Phe Ser Leu Lys Asn Leu Asp		140
145	150	155
Asn Ser Val His Leu Cys Asn Asn Ser Ile Gln Lys His Leu Glu Asn		160
	165	170
Ser Cys His Arg His Pro Leu Leu Pro Pro Asp Asn Met Trp Ser Ser		175
	180	185
Gln Arg Phe Gln Ala His Leu Gln Glu Met Gly Ala Pro Asn Ala Trp		190
	195	200
Ser Thr Ile Ile Val Pro Gly Met Lys Asp Ala Val Ile His Ala Leu		205
	210	215
Gln Thr Ser Gln Asp Thr Val Gln Cys Arg Lys Ala Ser Phe Glu Leu		220
225	230	235
Tyr Gly Ala Asp Phe Val Phe Gly Glu Asp Phe Gln Pro Trp Leu Ile		240
	245	250
Glu Ile Asn Ala Ser Pro Thr Met Ala Pro Ser Thr Ala Val Thr Ala		255
	260	265
Arg Leu Cys Ala Gly Val Gln Ala Asp Thr Leu Arg Val Val Ile Asp		270
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Arg Arg Leu Asp Arg Asn Cys Asp Thr Gly Ala Phe Glu Leu Ile Tyr		285
	290	295
Lys Gln Pro Val Thr Thr Ser Pro Ala Ser Thr Pro Arg Pro Ser Cys		300
305	310	315
Leu Leu Pro Met Tyr Ser Asp Thr Arg Ala Arg Ser Ser Asp Asp Ser		320
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Thr Ala Ser Trp Trp Ala Leu Arg Pro Cys Arg Pro Gln Ala Arg Pro		335
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<210> 5539

<211> 1887

<212> DNA

<213> Homo sapiens

<400> 5539

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<210> 5540

<211> 378

<212> PRT

<213> Homo sapiens

<400> 5540

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35      40      45
Ala Pro Trp Cys Ser Val Ser Ser Gly Pro Ser Arg Tyr Val Leu Gly
50      55      60
Met Gln Glu Leu Phe Arg Gly His Ser Lys Thr Arg Glu Phe Leu Ala
65      70      75      80
His Ser Ala Lys Val His Ser Val Ala Trp Ser Cys Asp Gly Arg Arg
85      90      95
Leu Ala Ser Gly Ser Phe Asp Lys Thr Ala Ser Val Phe Leu Leu Glu
100     105     110
Arg Thr Gly Trp Ser Lys Lys Thr Ile Ile Gly Asp Met Gly Ile Xaa
115     120     125
Val Asp Gln Leu Cys Trp His Pro Ser Asn Pro Asp Leu Phe Val Thr
130     135     140
Ala Ser Gly Asp Lys Thr Ile Arg Ile Trp Asp Val Arg Thr Thr Lys
145     150     155     160
Cys Ile Ala Thr Val Asn Thr Lys Gly Glu Asn Ile Asn Ile Cys Trp
165     170     175
Ser Pro Asp Gly Gln Thr Ile Ala Val Gly Asn Lys Asp Asp Val Val
180     185     190
Thr Phe Ile Asp Ala Lys Thr His Arg Ser Lys Ala Glu Glu Gln Phe
195     200     205
Lys Phe Glu Val Asn Glu Ile Ser Trp Asn Asn Asp Asn Asn Met Phe
210     215     220
Phe Leu Thr Asn Gly Asn Gly Cys Ile Asn Ile Leu Ser Tyr Pro Glu
225     230     235     240
Leu Lys Pro Val Gln Ser Ile Asn Ala His Pro Ser Asn Cys Ile Cys
245     250     255
Ile Lys Phe Asp Pro Met Gly Lys Tyr Phe Ala Thr Gly Ser Ala Asp
260     265     270
Ala Leu Val Ser Leu Trp Asp Val Asp Glu Leu Val Cys Val Arg Cys
275     280     285
Phe Ser Arg Leu Asp Trp Pro Val Arg Thr Leu Ser Phe Ser His Asp
290     295     300
Gly Lys Met Leu Ala Ser Ala Ser Glu Asp His Phe Ile Asp Ile Ala
305     310     315     320
Glu Val Glu Thr Gly Asp Lys Leu Trp Glu Val Gln Cys Glu Ser Pro
325     330     335
Thr Phe Thr Val Ala Trp His Pro Lys Arg Pro Leu Leu Ala Phe Ala
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<210> 5541

<211> 1854

<212> DNA

<213> Homo sapiens

<400> 5541

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<210> 5542

<211> 315

<212> PRT

<213> Homo sapiens

<400> 5542

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		20						25					30		
Trp	Leu	Tyr	Ser	Arg	Gly	Val	Cys	Arg	Thr	Lys	Ser	Thr	Ser	Asp	Asn
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Glu	Thr	Ser	Arg	Lys	Asn	Glu	Glu	Val	Met	Thr	His	Ser	Gly	Leu	Trp
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Arg	Thr	Cys	Cys	Leu	Glu	Gly	Ala	Phe	Arg	Gly	Val	Cys	Lys	Lys	Ile
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Asp	His	Phe	Pro	Glu	Asp	Ala	Asp	Tyr	Glu	Gln	Asp	Thr	Ala	Glu	Tyr
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Leu	Leu	Arg	Ala	Val	Arg	Ala	Ser	Ser	Val	Phe	Pro	Ile	Leu	Ser	Val
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Ala	Gly	Leu	Ser	Asn	Ile	Ile	Gly	Ile	Ile	Val	Tyr	Ile	Ser	Ala	Asn
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Ala	Gly	Asp	Pro	Gly	Gln	Arg	Asp	Ser	Lys	Lys	Ser	Tyr	Ser	Tyr	Gly
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Pro	Pro	Tyr	Arg	Tyr	Arg	Phe	Arg	Arg	Arg	Ser	Ser	Ser	Arg	Ser	Thr
225					230					235					240
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Ile	Pro	Ser	Thr	Asp	Ile	Ser	Met	Phe	Thr	Leu	Ser	Arg	Asp	Pro	Ser
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Lys	Ile	Thr	Met	Gly	Thr	Leu	Leu	Asn	Ser	Asp	Arg	Asp	His	Ala	Phe
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<210> 5543

<211> 4021

<212> DNA

<213> Homo sapiens

<400> 5543

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<210> 5544

<211> 1141

<212> PRT

<213> Homo sapiens

<400> 5544

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Tyr	Lys	Leu	Pro	Leu	Pro	Gly	Pro	Tyr	Asp	Ser	Arg	Asp	Asp	Phe	Pro					
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Ser Arg Thr Gln Ser Ser Pro Leu Pro Gln Ser Pro Gln Ala Leu Gln				
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Gln Leu Val Met Gln Gln Gln His Gln Gln Phe Leu Glu Lys Gln Lys				
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Gln Gln Gln Leu Gln Leu Gly Lys Ile Leu Thr Lys Thr Gly Glu Leu				
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Pro Leu Gln Val Tyr Gln Ala Pro Leu Ser Leu Ala Thr Val Pro His				
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Pro Gly His His Ala Glu Glu Ser Thr Ala Met Gly Phe Cys Phe Phe				
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Asn Ser Val Ala Ile Thr Ala Lys Leu Leu Gln Gln Lys Leu Asn Val				
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      965              970              975
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      980              985              990
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Lys Pro Asn Ile Asn Ala Val Ala Thr Leu Glu Lys Val Ile Glu Ile
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<210> 5545

<211> 1932

<212> DNA

<213> Homo sapiens

<400> 5545

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<211> 183
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 <213> Homo sapiens

<400> 5546

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Asn Glu Met Leu Leu Asn Phe Asn Asn Leu Ser Ser Ala Arg Leu Gln
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Gln Met Ser Glu Arg Phe Leu His His Thr Arg Thr Leu Val Glu Met
65           70           75           80
Lys Arg Asp Leu Asp Ser Ile Phe Arg Arg Ile Arg Thr Leu Lys Gly
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Lys Leu Ala Arg Gln His Pro Glu Ala Phe Ser His Ile Pro Glu Ala
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Ser Phe Leu Glu Glu Glu Asp Glu Asp Pro Ile Pro Pro Ser Thr Thr
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 <211> 1391
 <212> DNA
 <213> Homo sapiens

<400> 5547

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<210> 5548

<211> 167

<212> PRT

<213> Homo sapiens

<400> 5548

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<210> 5549
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 <212> DNA
 <213> Homo sapiens

<400> 5549
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<210> 5550

<211> 242

<212> PRT

<213> Homo sapiens

<400> 5550

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			20					25					30		
Arg	Trp	Ser	Arg	Tyr	Ser	Pro	Glu	Phe	Lys	Asp	Pro	Leu	Ile	Asp	Lys
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Glu	Tyr	Tyr	Arg	Lys	Pro	Val	Glu	Glu	Leu	Thr	Glu	Glu	Glu	Lys	Tyr
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Lys	Thr	Ser	Ser	Val	Phe	Glu	Asp	Pro	Val	Ile	Ser	Lys	Phe	Thr	Asn
				85					90					95	
Met	Met	Met	Ile	Gly	Gly	Asn	Lys	Val	Leu	Ala	Arg	Ser	Leu	Met	Ile
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Gln	Thr	Leu	Glu	Ala	Val	Lys	Arg	Lys	Gln	Phe	Glu	Lys	Tyr	His	Ala
	115					120						125			
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Phe	His	Gln	Ala	Leu	Lys	Asn	Cys	Glu	Pro	Met	Ile	Gly	Leu	Val	Pro
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Ile	Leu	Lys	Gly	Gly	Arg	Phe	Tyr	Gln	Val	Pro	Val	Pro	Leu	Pro	Asp
			165					170						175	
Arg	Arg	Arg	Arg	Phe	Leu	Ala	Met	Lys	Trp	Met	Ile	Thr	Glu	Cys	Arg
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Leu Leu Glu Ala Phe His Asn Gln Gly Pro Val Ile Lys Arg Lys His		
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Trp Trp		240

<210> 5551
 <211> 1689
 <212> DNA
 <213> Homo sapiens

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 1689

<210> 5552

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5552

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		20						25					30		
Tyr	Leu	Leu	Asp	Pro	Tyr	Val	Asn	Leu	Ala	Pro	Gly	Cys	Arg	Ser	Leu
		35				40						45			
Phe	Ser	Val	Ile	Val	Arg	Val	Val	Gly	Asp	Leu	Met	Leu	Arg	Ile	Gln
		50				55					60				
Arg	Ile	Gln	Asp	Phe	Thr	Pro	Lys	Leu	Leu	Leu	Val	Arg	Lys	Arg	Leu
65					70					75				80	
Leu	Gly	Leu	Glu	Pro	Glu	Gly	Pro	Ile	Ser	Asp	Leu	Glu	Pro	Val	Glu
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Ala	Leu	Thr	Val	Ser	Ser	Ile	Cys								
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<210> 5553

<211> 274

<212> DNA

<213> Homo sapiens

<400> 5553

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274

<210> 5554
<211> 90
<212> PRT
<213> Homo sapiens

<400> 5554
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35 40 45
Gly Pro Ala Thr Ala Pro Ala Val Val Leu Ser His Tyr Arg Gly Cys
50 55 60
Tyr Phe Pro Ser Gln Cys Pro Trp Gln Pro Trp Lys Pro Met Lys Gln
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85 90

<210> 5555
<211> 414
<212> DNA
<213> Homo sapiens

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240
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<210> 5556
<211> 115
<212> PRT
<213> Homo sapiens

<400> 5556
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35 40 45
 Gln Ala Lys Leu Glu Asp Ser Pro Asp Leu Arg Gly Ser Thr Arg Ser
 50 55 60
 Arg Cys Leu Leu Asp Leu Ser His Ser Ala His Pro Asn Leu Asn Pro
 65 70 75 80
 Ala Pro Gly Pro Thr Pro Val Pro Trp Leu Glu Thr Gly Ala Ser Ala
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 Gln Leu Phe Pro Phe Ser His Ser Leu Ser Ala Ala Cys Arg Val His
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 Ser Ala Ser
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<210> 5557

<211> 1970

<212> DNA

<213> Homo sapiens

<400> 5557

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<210> 5558

<211> 360

<212> PRT

<213> Homo sapiens

<400> 5558

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		20						25					30		
Ser	Val	Pro	Arg	Glu	Pro	Ile	Asp	Arg	Lys	Arg	Leu	Lys	Lys	Asp	Val
		35					40					45			
Glu	Pro	Ser	Cys	Ser	Gly	Ser	Ser	Leu	Gly	Pro	Asp	Lys	Gly	Leu	Ala
		50				55					60				
Gln	Ser	Pro	Pro	Ser	Ser	Ser	Leu	Thr	Ala	Thr	Arg	Gln	Lys	Pro	Ser
65					70					75				80	
Gln	Ser	Pro	Ser	Ala	Pro	Pro	Ala	Asp	Val	Thr	Pro	Lys	Pro	Ala	Thr
			85					90						95	
Glu	Ala	Val	Gln	Ser	Glu	His	Ser	Asp	Ala	Ser	Pro	Met	Ser	Ile	Asn
			100				105						110		
Glu	Val	Ile	Leu	Ser	Ala	Ser	Gly	Ala	Cys	Lys	Leu	Ile	Asp	Ser	Leu
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His	Ser	Tyr	Cys	Phe	Ser	Ser	Arg	Gln	Asn	Lys	Ser	Gln	Val	Cys	Cys

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Leu Asp Glu Leu Arg Arg Val Ser Val Pro Tyr Pro Ser Ser Leu Leu
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Ser Pro Ser Arg Glu Pro Pro Lys Met Asn Pro Val Val Glu Pro Leu
      195              200              205
Ser Trp Met Leu Gly Thr Trp Leu Ser Asp Pro Pro Gly Ala Gly Thr
      210              215              220
Tyr Pro Thr Leu Gln Pro Phe Gln Tyr Leu Glu Val His Ile Ser
225              230              235              240
His Val Gly Gln Pro Met Leu Asn Phe Ser Phe Asn Ser Phe His Pro
      245              250              255
Asp Thr Arg Lys Pro Met His Arg Glu Cys Gly Phe Ile Arg Leu Lys
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Pro Asp Thr Asn Lys Val Ala Phe Val Ser Ala Gln Asn Thr Gly Val
      275              280              285
Val Glu Val Glu Glu Gly Glu Val Asn Gly Gln Glu Leu Cys Ile Ala
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Ser His Ser Ile Ala Arg Ile Ser Phe Ala Lys Glu Pro His Val Glu
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Gln Ile Thr Arg Lys Phe Arg Leu Asn Ser Glu Gly Lys Leu Glu Gln
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<210> 5559

<211> 3866

<212> DNA

<213> Homo sapiens

<400> 5559

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<210> 5560
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 <213> Homo sapiens

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 Glu Ile Lys Leu Glu Ile Asn Met Leu Lys Lys Tyr Ser His His Arg
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 Asn Ile Ala Thr Tyr Tyr Gly Ala Phe Ile Lys Lys Ser Pro Pro Gly
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 His Asp Asp Gln Leu Trp Leu Val Met Glu Phe Cys Gly Ala Gly Ser
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 Ile Thr Asp Leu Val Lys Asn Thr Lys Gly Asn Thr Leu Lys Glu Asp
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 His Ile His His Val Ile His Arg Asp Ile Lys Gly Gln Asn Val Leu
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 Thr Tyr Asp Tyr Arg Ser Asp Leu Trp Ser Cys Gly Ile Thr Ala Ile
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 Glu Met Ala Glu Gly Ala Pro Pro Leu Cys Asp Met His Pro Met Arg
 225 230 235 240
 Ala Leu Phe Leu Ile Pro Arg Asn Pro Pro Pro Arg Leu Lys Ser Lys
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 Lys Trp Ser Lys Lys Phe Ile Asp Phe Ile Asp Thr Cys Leu Ile Lys
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 Tyr Glu Tyr Ser Gly Ser Glu Glu Glu Asp Asp Ser His Gly Glu Glu
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Gln Lys Glu Gln Arg Arg Arg Leu Glu Glu Gln Gln Arg Arg Glu Arg		
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Glu Ala Arg Arg Gln Gln Glu Arg Glu Gln Arg Arg Arg Glu Gln Glu		
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Glu Lys Arg Arg Leu Glu Glu Leu Glu Arg Arg Arg Lys Glu Glu Glu		
435	440	445
Glu Arg Arg Arg Ala Glu Glu Lys Arg Arg Val Glu Arg Glu Gln		
450	455	460
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Glu Arg Ser Lys Pro Ser Phe His Ala Pro Glu Pro Lys Ala His Tyr		
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Gln Asn Ser Gln Ala Gly Gln Arg Asn Ser Thr Ser Ser Ile Glu Pro		
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Arg Leu Leu Trp Glu Arg Val Glu Lys Leu Val Pro Arg Pro Gly Ser		
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Pro Gly Ser Gln Ser Gly Ser Gly Glu Arg Phe Arg Val Arg Ser Ser		
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Ser Lys Ser Glu Gly Ser Pro Ser Gln Arg Leu Glu Asn Ala Val Lys		
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Lys Pro Glu Asp Lys Lys Glu Val Phe Arg Pro Leu Lys Pro Ala Gly		
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Glu Val Asp Leu Thr Ala Leu Ala Lys Glu Leu Arg Ala Val Glu Asp		
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Asp Glu Ser Thr Ser Gly Pro Glu Asp Thr Arg Ala Ala Ser Ser Leu		
705	710	715
Asn Leu Ser Asn Gly Glu Thr Glu Ser Val Lys Thr Met Ile Val His		
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Asp Asp Val Glu Ser Glu Pro Ala Met Thr Pro Ser Lys Glu Gly Thr		
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Leu Ile Val Arg Gln Thr Gln Ser Ala Ser Ser Thr Leu Gln Lys His		
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Lys Ser Ser Ser Ser Phe Thr Pro Phe Ile Asp Pro Arg Leu Leu Gln		

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Ile Ser Pro Ser Ser Gly Thr Thr Val Thr Ser Val Val Gly Phe Ser				
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Cys Asp Gly Met Arg Pro Glu Ala Ile Arg Gln Asp Pro Thr Arg Lys				800
	805		810	815
Gly Ser Val Val Asn Val Asn Pro Thr Asn Thr Arg Pro Gln Ser Asp				
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Thr Pro Glu Ile Arg Lys Tyr Lys Lys Arg Phe Asn Ser Glu Ile Leu				
	835		840	845
Cys Ala Ala Leu Trp Gly Val Asn Leu Leu Val Gly Thr Glu Ser Gly				
	850		855	860
Leu Met Leu Leu Asp Arg Ser Gly Gln Gly Lys Val Tyr Pro Leu Ile				880
		870		875
Asn Arg Arg Arg Phe Gln Gln Met Asp Val Leu Glu Gly Leu Asn Val				
	885		890	895
Leu Val Thr Ile Ser Gly Lys Lys Asp Lys Leu Arg Val Tyr Tyr Leu				
	900		905	910
Ser Trp Leu Arg Asn Lys Ile Leu His Asn Asp Pro Glu Val Glu Lys				
	915		920	925
Lys Gln Gly Trp Thr Thr Val Gly Asp Leu Glu Gly Cys Val His Tyr				
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Lys Val Val Lys Tyr Glu Arg Ile Lys Phe Leu Val Ile Ala Leu Lys				
		950		955
Ser Ser Val Glu Val Tyr Ala Trp Ala Pro Lys Pro Tyr His Lys Phe				
	965		970	975
Met Ala Phe Lys Ser Phe Gly Glu Leu Val His Lys Pro Leu Leu Val				
	980		985	990
Asp Leu Thr Val Glu Glu Gly Gln Arg Leu Lys Val Ile Tyr Gly Ser				
	995		1000	1005
Cys Ala Gly Phe His Ala Val Asp Val Asp Ser Gly Ser Val Tyr Asp				
	1010		1015	1020
Ile Tyr Leu Pro Thr His Val Arg Lys Asn Pro His Ser Met Ile Gln				
		1030		1035
Cys Ser Ile Lys Pro His Ala Ile Ile Ile Leu Pro Asn Thr Asp Gly				
	1045		1050	1055
Met Glu Leu Leu Val Cys Tyr Glu Asp Glu Gly Val Tyr Val Asn Thr				
	1060		1065	1070
Tyr Gly Arg Ile Thr Lys Asp Val Val Leu Gln Trp Gly Glu Met Pro				
	1075		1080	1085
Thr Ser Val Ala Tyr Ile Arg Ser Asn Gln Thr Met Gly Trp Gly Glu				
	1090		1095	1100
Lys Ala Ile Glu Ile Arg Ser Val Glu Thr Gly His Leu Asp Gly Val				
	1105		1110	1115
Phe Met His Lys Arg Ala Gln Arg Leu Lys Phe Leu Cys Glu Arg Asn				
	1125		1130	1135
Asp Lys Val Phe Phe Ala Ser Val Arg Ser Gly Gly Ser Ser Gln Val				
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<210> 5561

<211> 2089

<212> DNA

<213> Homo sapiens

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<211> 372

<212> PRT

<213> Homo sapiens

<400> 5562

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Ile	Cys	Val	Asp	Cys	Ala	Met	Glu	Ser	Ser	Arg	Asn	Ser	Ser	Met	Leu
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<211> 683

<212> PRT

<213> Homo sapiens

<400> 5564

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Ser	Ala	Glu	Arg	Ala	Leu	Glu	Glu	Ala	Val	Ala	Thr	Gly	Thr	Leu	Asn
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Leu	Ser	Asn	Arg	Arg	Leu	Lys	His	Phe	Pro	Arg	Gly	Ala	Ala	Arg	Ser
	50					55				60					
Tyr	Asp	Leu	Ser	Asp	Ile	Thr	Gln	Ala	Asp	Leu	Ser	Arg	Asn	Arg	Phe
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Pro	Glu	Val	Pro	Glu	Ala	Ala	Cys	Gln	Leu	Val	Ser	Leu	Glu	Gly	Leu
			85					90					95		
Ser	Leu	Tyr	His	Asn	Cys	Leu	Arg	Cys	Leu	Asn	Pro	Ala	Leu	Gly	Asn
		100					105					110			
Leu	Thr	Ala	Leu	Thr	Tyr	Leu	Asn	Leu	Ser	Arg	Asn	Gln	Leu	Ser	Leu
		115				120					125				
Leu	Pro	Pro	Tyr	Ile	Cys	Gln	Leu	Pro	Leu	Arg	Val	Leu	Ile	Val	Ser
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Asn	Asn	Lys	Leu	Gly	Ala	Leu	Pro	Pro	Asp	Ile	Gly	Thr	Leu	Gly	Ser
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Gln	Leu	Ser	Thr	Leu	Pro	Glu	Glu	Leu	Gly	Asp	Leu	Pro	Leu	Val	Arg
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Ser	Pro	Pro	Ala	Gln	Val	Cys	Leu	Lys	Gly	Lys	Leu	His	Ile	Phe	Lys
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Val	Asp	Ser	Gly	Ser	Lys
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Phe	Ser	Glu	Leu	Ser	Phe
	325		330		335
Gly	Pro	Arg	Glu	Arg	Lys
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Gln	Ile	Asp	Phe	Ile	Asp
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Gly	Thr	Val	Glu	Gln	Arg
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Asp	Arg	Glu	Arg	Ala	Pro
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Glu	Arg	Arg	Arg	Pro	Asp
	405		410		415
Arg	Gln	Gln	Gln	Gln	Ser
	420		425		430
Leu	Leu	Lys	Pro	Gly	Leu
	435		440		445
Ser	Thr	Gln	Ala	Met	His
	450		455		460
Ala	Gly	Gly	Cys	Ser	Gly
465			470		475
Gln	Glu	Pro	Leu	Pro	Ile
	485		490		495
Pro	Leu	Gly	Ser	Ile	Gln
	500		505		510
Ser	Gln	Ser	Gly	Ser	Gly
	515		520		525
Arg	Arg	Tyr	Pro	Gln	Val
	530		535		540
Arg	Gln	Val	Leu	Glu	Ser
545			550		555
Ala	Glu	Ala	Leu	Ala	Ser
	565		570		575
Leu	Arg	Pro	Arg	Ser	Val
	580		585		590
Pro	Lys	Leu	Ser	Ala	Leu
	595		600		605
Glu	Ala	Cys	Arg	Lys	Met
	610		615		620
Ser	Asp	Leu	Leu	Gln	Gly
625			630		635
Ala	Val	Lys	Arg	Val	Gly
	645		650		655
Ser	Gly	Leu	Gly	Gly	Phe
	660		665		670
Leu	Tyr	Val	Thr	Tyr	Thr
	675		680		

<210> 5565
 <211> 472
 <212> DNA
 <213> Homo sapiens

<400> 5565
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 180
 acttaaaactc cagtgccag tcctatgcaa tcagatcctg ggtctccact gtgcagcgcc
 240
 cgtggagagc cagcgatgtg gagggctcgag atcaccagc tctttgggga cagggtctca
 300
 ctgcccccaa ggctggagtc cgggtgtgca atcacggctc acagcagtct cgacctccag
 360
 ggctcaagcg atcctccagc ctcagcctcc cgagcagctg ggagcacagg cgcataccac
 420
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 472

<210> 5566
 <211> 76
 <212> PRT
 <213> Homo sapiens

<400> 5566
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 20 25 30
 Leu Pro Pro Arg Leu Glu Ser Gly Gly Ala Ile Thr Ala His Ser Ser
 35 40 45
 Leu Asp Leu Gln Gly Ser Ser Asp Pro Pro Ala Ser Ala Ser Arg Ala
 50 55 60
 Ala Gly Ser Thr Gly Ala Tyr His Ala Trp Leu Phe
 65 70 75

<210> 5567
 <211> 968
 <212> DNA
 <213> Homo sapiens

<400> 5567
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 120
 taaaaacat ttttagctca caagctgtac aaaaacagac ggtgagtaaa ttggccca
 180
 gaccggtttg ctageccctg ggcttaagag atctgtccac ttactcctca acatgcagag
 240

tgtgaactgt gtgaactgca taggccacag caatcttact gcatccattc ccgctgcatc
 300
 attatttttg atttgatttc attcagtgca ccgaagcatt cacttggcac ctctccaaat
 360
 ctgggtactg tgcaagatcc ttccttggga cactgaagga aaatcagaca cgcccttct
 420
 ctcaagttcg cagactctcc ggtatccaga tactacggct ctcatagtat cagaaaacac
 480
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 720
 cttagggttc tttggtcat agatgcattg ctctaattc tgctccatc tccccatggc
 780
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 840
 ccaccctact acaggttgat ctcatctcca ggtccttgat ttcattctgca aaaacttttt
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 960
 cctattac
 968

<210> 5568
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 5568
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 20 25 30
 His Arg Ser Ile His Leu Ala Pro Leu Gln Ile Trp Val Leu Cys Lys
 35 40 45
 Ile Leu Pro Trp Asp Thr Glu Gly Lys Ser Asp Thr Ala Leu Leu Ser
 50 55 60
 Ser Ser Gln Thr Leu Arg Tyr Pro Asp Thr Thr Ala Leu Ile Val Ser
 65 70 75 80
 Glu Asn Thr Ala Thr Ser Ala Gly Lys Tyr Gln Arg Cys Phe Thr Arg
 85 90 95
 Tyr Met Tyr Gln Ile Leu Lys Ala Ala Val Pro Lys Tyr His Lys Leu
 100 105 110
 His Gly Leu Lys Gln Gln Lys Phe Ile Pro Ser Gln Ser Trp Arg Pro
 115 120 125
 Asp Val
 130

<210> 5569
 <211> 876

<212> DNA

<213> Homo sapiens

<400> 5569

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120
ttgcataacc ccgggggacc cccttctctt ttgtgatgcc ccagaacaat attgatttga
180
ttatagaaag ccaccggcag cctacatgcg caacgggtgag ttgttggtta tataactgt
240
ggaccataca gtggaatatt acagtcaata aaaggatattt ttagagagaa aaaaaaacat
300
tggaacacgc ttatgatata atgttaggca aaatcgctgt tatgaacagc tcgtttgggg
360
cagagcaaat cctgggaagt aacgctgagg ctgttggtgc aggcgggtgga gtacaacatc
420
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480
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540
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600
gaggcatcct ggggctgcac tgetgacct cttctctctc ccctggccct gagtgtctgc
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720
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780
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<210> 5570

<211> 169

<212> PRT

<213> Homo sapiens

<400> 5570

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Thr Ala Arg Leu Gly Gln Ser Lys Ser Trp Glu Val Thr Leu Arg Leu
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Leu Val Gln Ala Val Glu Tyr Asn Ile Phe Glu Gly Met Glu Cys His
20          25          30
Gly Ser Pro Leu Val Val Ile Ser Gln Gly Lys Ile Val Phe Glu Asp
35          40          45
Gly Asn Ile Asn Val Asn Lys Gly Met Gly Arg Phe Ile Pro Arg Lys
50          55          60
Ala Phe Pro Glu His Ser Ser Thr Trp Leu Glu Leu His Asn His Gly
65          70          75          80
Arg Arg His Val Cys Glu Ala Ser Trp Gly Cys Thr Ala Asp Pro Leu
85          90          95
Leu Ser Pro Leu Ala Leu Ser Ala Ala Phe Met Trp Leu Ser Pro Ser

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	100		105		110										
Val	Leu	Gln	Ala	Phe	Ile	Ser	Phe	Arg	Ala	Ala	Pro	Ser	Leu	Cys	Pro
	115		120		125										
Gly	Thr	Leu	Ala	Lys	Met	Gln	Cys	Leu	Pro	Asn	Ser	His	Ile	Ser	Phe
	130		135		140										
Asn	Gln	Gly	Ala	Ile	Pro	Ala	Trp	Lys	Ser	Pro	Ser	Cys	Ser	Cys	Trp
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Gln	Val	Gln	Val	Pro	Val	Cys	Asp	Gly							
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<210> 5571

<211> 405

<212> DNA

<213> Homo sapiens

<400> 5571

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120
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180
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240
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300
aacgtggatg ggaaggccta ccgcaccatg atggcccaga tcttctcgca gcgcctcgct
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405

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<210> 5572

<211> 135

<212> PRT

<213> Homo sapiens

<400> 5572

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Ser	Tyr	His	Pro	Met	Val	Thr	Ala	Ser	Glu	Arg	Ile	Phe	Val	Leu	Asn
			20					25					30		
Gln	Leu	Arg	Asp	Pro	Thr	Ser	Pro	Lys	Phe	Pro	Glu	Asp	Phe	Asp	Asp
	35						40					45			
Gly	Glu	His	Ala	Lys	Gln	Lys	Ser	Val	Ile	Ser	Trp	Leu	Leu	Asn	His
	50					55				60					
Asp	Pro	Ala	Lys	Arg	Pro	Thr	Ala	Thr	Glu	Leu	Leu	Lys	Ser	Glu	Leu
65					70				75					80	
Leu	Pro	Pro	Pro	Gln	Met	Glu	Glu	Ser	Glu	Leu	His	Glu	Val	Leu	His
				85				90					95		
His	Thr	Leu	Thr	Asn	Val	Asp	Gly	Lys	Ala	Tyr	Arg	Thr	Met	Met	Ala
			100				105					110			
Gln	Ile	Phe	Ser	Gln	Arg	Leu	Ala	Gly	Ala	Gly	Gly	Gly	Gly	Tyr	Arg
	115					120						125			
Ser	Arg	Leu	Gly	Val	Pro	Arg									

130

135

<210> 5573

<211> 1279

<212> DNA

<213> Homo sapiens

<400> 5573

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120
tccgtcagag cctaggggag cctgccctcc cgcgcctcgt cggggcccg ccaggcacct
180
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240
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300
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360
gaagactggt gcagggggat ggacatgaac cctcggaaag cgctattgat tgccggcatc
420
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480
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540
gtagggctta ctgcggagac tagtcacgcc ctgggtcccta aggagatacc gggaaaagg
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ggtatctgga gagtgatctt taagccccct gaccagata atacatcttt aagcagatta
660
aatgaatttt tagcgggaga gggcatgaca gtgggtgagt tgagcagagc tcttggacat
720
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780
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900
catactactc agatgataaa ggcgtggcag gtgccagatg tagagaagag aaggcgattg
960
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1080
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<210> 5574

<211> 312

<212> PRT

<213> Homo sapiens

<400> 5574

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Pro Arg Lys Ala Leu Leu Ile Ala Gly Ile Ser Gln Ser Cys Ser Val
      20           25           30
Ala Glu Ile Glu Glu Ala Leu Gln Ala Gly Leu Ala Pro Leu Gly Glu
      35           40           45
Tyr Arg Leu Leu Gly Arg Met Phe Arg Arg Asp Glu Asn Arg Lys Val
      50           55           60
Ala Leu Val Gly Leu Thr Ala Glu Thr Ser His Ala Leu Val Pro Lys
      65           70           75           80
Glu Ile Pro Gly Lys Gly Gly Ile Trp Arg Val Ile Phe Lys Pro Pro
      85           90           95
Asp Pro Asp Asn Thr Phe Leu Ser Arg Leu Asn Glu Phe Leu Ala Gly
      100          105          110
Glu Gly Met Thr Val Gly Glu Leu Ser Arg Ala Leu Gly His Glu Asn
      115          120          125
Gly Ser Leu Asp Pro Glu Gln Gly Met Ile Pro Glu Met Trp Ala Pro
      130          135          140
Met Leu Ala Gln Ala Leu Glu Ala Leu Gln Pro Ala Leu Gln Cys Leu
      145          150          155          160
Lys Tyr Lys Lys Leu Arg Val Phe Ser Gly Arg Glu Ser Pro Glu Pro
      165          170          175
Gly Glu Glu Glu Phe Gly Arg Trp Met Phe His Thr Thr Gln Met Ile
      180          185          190
Lys Ala Trp Gln Val Pro Asp Val Glu Lys Arg Arg Arg Leu Leu Glu
      195          200          205
Ser Leu Arg Gly Pro Ala Leu Asp Val Ile Arg Val Leu Lys Ile Asn
      210          215          220
Asn Pro Leu Ile Thr Val Asp Glu Cys Leu Gln Ala Leu Glu Glu Val
      225          230          235          240
Phe Gly Val Thr Asp Asn Pro Arg Glu Leu Gln Val Lys Tyr Leu Thr
      245          250          255
Thr Tyr Gln Lys Asp Glu Glu Lys Leu Ser Ala Tyr Val Leu Arg Leu
      260          265          270
Glu Pro Leu Leu Gln Lys Leu Val Gln Arg Gly Ala Ile Glu Arg Asp
      275          280          285
Ala Val Asn Gln Ala Arg Leu Asp Gln Val Ile Ala Gly Ala Val His
      290          295          300
Lys Thr Ile Arg Arg Glu Leu Asn
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<210> 5575

<211> 2405

<212> DNA

<213> Homo sapiens

<400> 5575

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 2220
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 2405

<210> 5576
 <211> 367
 <212> PRT
 <213> Homo sapiens

<400> 5576
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 Gln Ala Leu Thr Gly Asn Glu Gly Arg Val Ser Val Glu Asn Ile Lys
 35 40 45
 Gln Leu Leu Gln Cys Leu Val Pro Gly Ser Thr Thr Leu His Ser Ala
 50 55 60
 Glu Ile Leu Ala Glu Ile Ala Arg Ile Leu Arg Pro Gly Gly Cys Leu
 65 70 75 80
 Phe Leu Lys Glu Pro Val Glu Thr Ala Val Asp Asn Asn Ser Lys Val
 85 90 95
 Lys Thr Ala Ser Lys Leu Cys Ser Ala Leu Thr Leu Ser Gly Leu Val
 100 105 110
 Glu Val Lys Glu Leu Gln Arg Glu Pro Leu Thr Pro Glu Glu Val Gln
 115 120 125
 Ser Val Arg Glu His Leu Gly His Glu Ser Asp Asn Leu Leu Phe Val
 130 135 140
 Gln Ile Thr Gly Lys Lys Pro Asn Phe Glu Val Gly Ser Ser Arg Gln
 145 150 155 160
 Leu Lys Leu Ser Ile Thr Lys Lys Ser Ser Pro Ser Val Lys Pro Ala

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<210> 5577
<211> 659
<212> DNA
<213> Homo sapiens
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<400> 5577
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120
cctgtggccg acatgagggc actcctgaca ggcaaggact gcccccatgt ccggggagaag
180
ggctccggga agcagaacaa ggacctctat gagttagcct tctcaatcag ctatgaccgt
240
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360
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<210> 5578
 <211> 166
 <212> PRT
 <213> Homo sapiens

<400> 5578
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 20 25 30
 Xaa Glu Ser Leu Pro Glu Gln Leu Pro Val Ala Asp Met Arg Ala Leu
 35 40 45
 Leu Thr Gly Lys Asp Cys Pro His Val Arg Glu Lys Gly Ser Gly Lys
 50 55 60
 Gln Asn Lys Asp Leu Tyr Glu Leu Ala Phe Ser Ile Ser Tyr Asp Arg
 65 70 75 80
 Gly Glu Glu Glu Ala Tyr Leu Asn Phe Ile Ala Pro Ser Lys Arg Glu
 85 90 95
 Phe Tyr Leu Trp Thr Asp Gly Leu Ser Ala Leu Leu Gly Ser Pro Met
 100 105 110
 Gly Ser Glu Gln Thr Arg Leu Asp Leu Glu Gln Leu Leu Thr Met Glu
 115 120 125
 Thr Lys Leu Arg Leu Leu Glu Leu Glu Asn Val Pro Ile Pro Glu Arg
 130 135 140
 Pro Pro Pro Val Pro Pro Pro Pro Thr Asn Phe Asn Phe Cys Tyr Asp
 145 150 155 160
 Cys Ser Ile Ala Glu Pro
 165

<210> 5579
 <211> 1312
 <212> DNA
 <213> Homo sapiens

<400> 5579
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 cacttactac ctacagctcc aactaccgtg aatgtaacac atcgtccagt aactcaggtg
 180
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 aacaatggac taaccctggg atcaacagga cctcagctca cagtgcacat cgcaccacca
 420
 caagtgcata ctgagccccc acgccccgtg caccagcac ccttaccaga agctccacaa
 480
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<211> 283

<212> PRT

<213> Homo sapiens

<400> 5580

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			20					25					30		
Ser	Gly	Pro	Ser	Gln	Thr	Thr	Ile	His	Leu	Leu	Pro	Thr	Ala	Pro	Thr
			35				40					45			
Thr	Val	Asn	Val	Thr	His	Arg	Pro	Val	Thr	Gln	Val	Thr	Thr	Arg	Leu
	50				55					60					
Pro	Val	Pro	Arg	Ala	Pro	Ala	Asn	His	Gln	Val	Val	Tyr	Thr	Thr	Leu
65				70					75					80	
Pro	Ala	Pro	Pro	Ala	Gln	Ala	Pro	Leu	Arg	Gly	Thr	Val	Met	Gln	Ala
				85				90						95	
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Pro	Gln	Thr	Thr	Thr	Tyr	Val	Val	Asn	Asn	Gly	Leu	Thr	Leu	Gly	Ser
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	130				135						140				
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Pro Ser Ser Lys Asn Leu Trp Glu Gln Ile Cys Lys Glu Tyr Glu Ala			
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Glu Gln Pro Pro Phe Pro Glu Gly Tyr Lys Val Lys Gln Glu Pro Val			
65	70	75	80
Ile Thr Val Ala Pro Val Glu Glu Met Leu Phe His Gly Phe Ser Ala			
	85	90	95
Glu His Tyr Phe Pro Val Ser His Phe Thr Met Ile Ser Arg Thr Pro			
	100	105	110
Cys Pro Gln Asp Lys Ser Glu Thr Ile Asn Pro Lys Thr Cys Ser Pro			
	115	120	125
Lys Glu Tyr Leu Glu Thr Phe Ile Phe Pro Val Leu Leu Pro Gly Met			
	130	135	140
Ala Ser Leu Leu His Gln Ala Lys Lys Glu Lys Cys Phe Glu Val Ser			
145	150	155	160
Cys Leu Ala Gly Phe Leu Tyr Phe Glu Ile Leu Asn His Ser Leu Leu			
	165	170	175
Ser Asp Asp Ser Ser Leu Ser Trp Tyr His Gln Val Val Leu Gln Met			
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Ser His Thr Ile			
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<210> 5583

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<212> DNA

<213> Homo sapiens

<400> 5583

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<211> 454

<212> PRT

<213> Homo sapiens

<400> 5584

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Glu Arg Val Ala Ala Leu Gln Thr Val Gly Pro Thr Ala Gly Pro Ala
 35          40          45
Pro Asn Ala Phe Thr Ser Thr Leu Glu Lys Val Gly Asp His Gln Phe
 50          55          60
Leu Leu Tyr Ser Gly Arg Ser Pro Pro Thr Pro Thr Gly Leu Val His
 65          70          75          80
Leu Val Val Val Ala Ala Lys Lys Leu Val Asn Arg Leu Gln Val Ala
 85          90          95
Pro Lys Thr Gln Leu Asp Glu Thr Val Leu Trp Val Val His Val Ser
100          105          110
Gly Pro Ile Asn Pro Gln Val Leu Lys Ser Lys Ala Ala Lys Glu Leu
115          120          125
Lys Ala Leu Gln Asp Leu Ala Arg Lys Glu Met Leu Glu Leu Leu Asp
130          135          140
Met Pro Ala Ala Glu Leu Leu Gln Asp His Gln Leu Leu Trp Ala Gln
145          150          155          160
Leu Phe Ser Pro Gly Val Glu Met Lys Lys Ile Thr Asp Thr His Thr
165          170          175
Pro Ser Gly Leu Thr Val Asn Leu Thr Leu Tyr Tyr Met Leu Ser Cys
180          185          190
Ser Pro Ala Pro Leu Leu Ser Pro Ser Leu Ser His Arg Glu Arg Asp
195          200          205
Gln Met Glu Ser Thr Leu Asn Tyr Glu Asp His Cys Phe Ser Gly His
210          215          220
Ala Thr Met His Ala Glu Asn Leu Trp Pro Gly Arg Leu Ser Ser Val
225          230          235          240
Gln Gln Ile Leu Gln Leu Ser Asp Leu Trp Arg Leu Thr Leu Gln Lys
245          250          255
Arg Gly Cys Lys Gly Leu Val Lys Val Gly Ala Pro Gly Ile Leu Gln
260          265          270
Gly Met Val Leu Ser Phe Gly Gly Leu Gln Phe Thr Glu Asn His Leu
275          280          285
Gln Phe Gln Ala Asp Pro Asp Val Leu His Asn Ser Tyr Ala Leu His
290          295          300
Gly Ile Arg Tyr Lys Asn Asp His Ile Asn Leu Ala Val Leu Arg Met
305          310          315          320
Pro Arg Ala Ser Pro Thr Tyr Thr Cys Pro Trp Ser Pro Val Ala Ser
325          330          335
Leu Ser Xaa Ile Tyr Ala Cys Lys Ala Gly Cys Leu Asp Glu Pro Val
340          345          350
Glu Leu Thr Ser Ala Pro Thr Gly His Thr Phe Ser Val Met Val Thr
355          360          365
Gln Pro Ile Thr Pro Leu Leu Tyr Ile Ser Thr Asp Leu Thr His Leu
370          375          380
Gln Asp Leu Arg His Thr Leu His Leu Lys Ala Ile Leu Ala His Asp

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385 390 395 400
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 <212> DNA
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<210> 5586
 <211> 87
 <212> PRT
 <213> Homo sapiens

<400> 5586
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 20 25 30
 Leu Lys Arg Ser Cys Pro Thr Tyr Leu Ser Pro Pro Gln Pro Lys Asp

35 40 45
 Ser Ser Lys Leu Leu Cys Ser Met Thr Ala Ala Cys Pro Thr Leu Ser
 50 55 60
 Leu Leu Asp Leu Gln Leu Arg Leu Arg Arg Glu Val Gly Glu Gly His
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<210> 5587

<211> 853

<212> DNA

<213> Homo sapiens

<400> 5587

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<210> 5588

<211> 204

<212> PRT

<213> Homo sapiens

<400> 5588

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<212> PRT

<213> Homo sapiens

<400> 5590

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Thr	Lys	Leu	Ser	Ser	Lys	Thr	Thr	Ala	Lys	Leu	Ser	Thr	Ser	Ala	Lys
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Cys	Ser	Ala	Gly	Pro	Lys	Gly	Asp	Asn	Ile	Tyr	Glu	Trp	Arg	Ser	Thr
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Asp	Ile	Thr	Phe	Ser	Ser	Asp	Tyr	Pro	Phe	Lys	Pro	Pro	Lys	Val	Thr
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<211> 2194

<212> DNA

<213> Homo sapiens

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<210> 5592
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 <212> PRT
 <213> Homo sapiens

<400> 5592
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 Gln Ala Pro Ser Gly Ala Glu Leu Trp Val Trp Phe
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<211> 3078

<212> DNA

<213> Homo sapiens

<400> 5593

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<210> 5594
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 115 120 125
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 Ser Thr Leu Val Arg Glu Glu Ser Ser Ser Ser Asp Glu Asp Asp Arg
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<210> 5596
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 Met Arg Val Glu Lys Phe Ile Tyr Glu Asn His Pro Asp Val Phe Ser
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 Asp Ser Ser Met Asp His Phe Gln Lys Phe Leu Pro Thr Val Gly Gly
 85 90 95
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 Ser Asp Gln Gln His His Leu Gly Ser Gly Ser Gly Ala Gly Gly Thr
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 Gly Gly Pro Ala Gly Gln Ala Gly Arg Gly Gly Ala Ala Gly Thr Ala
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 Gly Val Gly Glu Thr Gly Ser Gly Asp Gln Ala Gly Gly Glu Gly Lys
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 His Ile Thr Val Phe Lys Thr Tyr Ile Ser Pro Trp Glu Arg Ala Met
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 Tyr Gly Ala Lys Ala Glu Leu Pro Lys Tyr Lys Ser Phe Asn Arg Thr
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 Ala Met Pro Tyr Gly Gly Tyr Glu Lys Ala Ser Lys Arg Met Thr Phe
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 Gln Met Pro Lys Phe Asp Leu Gly Pro Leu Leu Ser Glu Pro Leu Val
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<211> 312

<212> PRT

<213> Homo sapiens

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<211> 4492

<212> DNA

<213> Homo sapiens

<400> 5599

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<211> 923

<212> PRT

<213> Homo sapiens

<400> 5600

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35 40 45
Tyr Phe Pro Phe Met Asp Leu Lys Leu Arg Ala Ala Ser Pro Ile Ile
50 55 60
Thr Leu Val Ala Leu Asp Glu Ala Leu Asp Asn Tyr Thr Ile Thr Phe
65 70 75 80
Leu Ile Arg Gly Val Ala Ile Gly Gln Thr Ser Leu Thr Ala Ser Val
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Thr Asn Lys Ala Gly Gln Arg Ile Asn Ser Ala Pro Gln Gln Ile Glu
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Gln Asp Leu Val Gln Val Glu Val Leu Leu Leu Arg Ala Val Arg Ile
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Val Pro Gly Leu Thr Phe His Trp Ser Val Thr Lys Arg Asp Val Leu
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Asp Leu Arg Gly Arg His His Glu Ala Ser Ile Arg Leu Pro Ser Gln
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Tyr Asn Phe Ala Met Asn Val Leu Gly Arg Val Lys Gly Arg Thr Gly
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Gly Leu Ala Arg Glu Leu Ser Asp Glu Ile Gln Val Gln Val Phe Glu

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Cys	Leu	Ala	Thr	Val	Leu	Thr	Ser	Leu	Glu	Gly	Leu	Ser	Gly	Thr
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Ala	Ser	Leu	Ser	Ser	Ser	His	Phe	Ser	Thr	Glu	Gln	Val	Gly	Ala
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Val	Pro	Phe	Ser	Pro	Gly	Leu	Phe	Ala	Asp	Gln	Ala	Glu	Ile	Leu
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<213> Homo sapiens
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4786

<210> 5602
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 Gly Gly Val Ile Glu Glu Leu Ser Cys Val Arg Ser Asn Asn Tyr Val
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<211> 560

<212> PRT

<213> Homo sapiens

<400> 5604

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His	Ser	Asn	Trp	Ser	Leu	Glu	Asp	Thr	Gly	Ala	Leu	Leu	Ser	Ser	Gly	50	55	60	
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Lys	Ile	Val	Asp	Ile	Met	Ala	Lys	Trp	Asn	Arg	Ala	Ser	Ser	Cys	Lys	290	295	300	
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Pro	Thr	Glu	Val	Gln	Lys	His	Asn	Leu	Ser	Tyr	Leu	Phe	Tyr	Asn	Trp	325	330	335	
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<211> 101
<212> PRT
<213> Homo sapiens
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<400> 5606

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Leu Phe Pro Ser Ser Glu Cys Gly Trp Phe Ser Leu Leu Leu Ser Ser
      35             40             45
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      50             55             60
Val Thr Thr Thr Ser Ser Arg Ser Thr Pro Arg Pro Ser Val Ser Pro
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<210> 5607

<211> 320

<212> DNA

<213> Homo sapiens

<400> 5607

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<210> 5608

<211> 106

<212> PRT

<213> Homo sapiens

<400> 5608

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Ile His Ala Val Val Leu Pro Arg Gly Lys Ser Leu Asp Gln Cys Val
      35             40             45
Glu Thr Leu Gln Lys Gln Thr Arg Val Gly Lys Ala Gly Thr Asn Lys
      50             55             60
Pro Pro Arg Cys Arg Gly Arg Gly Ala Arg Pro Gly Gly Arg Pro Ala
65             70             75             80
Pro Arg Asn Val Phe Asp Phe Leu Asn Glu Lys Leu Gln Gly Gln Ala
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Pro Gly Ala Leu Gln Ala Gly Arg Pro Gln

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<210> 5609

<211> 1843

<212> DNA

<213> Homo sapiens

<400> 5609

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<211> 153

<212> PRT

<213> Homo sapiens

<400> 5610

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			20					25					30		
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Ile	Pro	Gln	Cys	Gly	Asn	Gly	Pro	Leu	Arg	Leu	Val	Leu	Arg	Val	Pro
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<211> 1152

<212> DNA

<213> Homo sapiens

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<210> 5612

<211> 289

<212> PRT

<213> Homo sapiens

<400> 5612

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			20				25						30		
Ile	Lys	Leu	His	Arg	Gly	Arg	Gly	Val	Ala	Ala	Met	Gln	Ser	Arg	Gln
		35				40					45				
Trp	Val	Arg	Asp	Ser	Cys	Arg	Lys	Leu	Ser	Gly	Leu	Leu	Arg	Gln	Lys
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<211> 242

<212> PRT

<213> Homo sapiens

<400> 5614

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 Leu Asn His Gln Glu Val Val Glu Glu Asp Lys Arg Leu Lys Leu Pro
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<212> DNA
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<211> 507

<212> PRT

<213> Homo sapiens

<400> 5616

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			20					25					30		
Gln	Gln	Gln	Gln	Gln	Gly	Val	Leu	Pro	Gln	Thr	Val	Pro	Ser	Gln	Pro
			35				40					45			
Ser	Ser	Ser	Thr	Val	Pro	Pro	Pro	Pro	His	Arg	Pro	Leu	Tyr	Gln	Pro
			50			55					60				
Met	Gln	Pro	His	Pro	Gln	His	Leu	Ala	Ser	Met	Gly	Phe	Asp	Pro	Arg
65				70					75					80	
Trp	Leu	Met	Met	Gln	Ser	Tyr	Met	Asp	Pro	Arg	Met	Met	Ser	Gly	Arg
			85					90					95		
Pro	Ala	Met	Asp	Ile	Pro	Pro	Ile	His	Pro	Gly	Met	Ile	Pro	Pro	Lys
			100				105					110			
Pro	Leu	Met	Arg	Arg	Asp	Gln	Met	Glu	Gly	Ser	Pro	Asn	Ser	Ser	Glu
			115			120					125				
Ser	Phe	Glu	His	Ile	Ala	Arg	Ser	Ala	Arg	Asp	His	Ala	Ile	Ser	Leu
			130			135					140				
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Pro	Gln	Gln	Ala	Thr	Thr	Pro	Lys	Ala	Thr	Glu	Glu	Pro	Glu	Asp	Val

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<211> 1003

<212> PRT

<213> Homo sapiens

<400> 5618

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Lys	Ala	Arg	Leu	Ala	Ser	Gln	Glu	Ala	Glu	Leu	Gln	Leu	Arg	Asn	His
			85					90					95		
Asp	Ala	Glu	Ala	Leu	Ile	Thr	Lys	Ile	Gly	Leu	Gln	Thr	Glu	Lys	Val
		100					105					110			
Ser	Arg	Glu	Lys	Thr	Ile	Ala	Asp	Ala	Glu	Glu	Arg	Lys	Val	Thr	Ala
	115					120					125				
Ile	Gln	Thr	Glu	Val	Phe	Gln	Lys	Gln	Arg	Glu	Cys	Glu	Ala	Asp	Leu
	130					135					140				
Leu	Lys	Ala	Glu	Pro	Ala	Leu	Val	Ala	Ala	Thr	Ala	Ala	Leu	Asn	Thr
145					150				155					160	
Leu	Asn	Arg	Val	Asn	Leu	Ser	Glu	Leu	Lys	Ala	Phe	Pro	Asn	Pro	Pro
			165					170					175		
Ile	Ala	Val	Thr	Asn	Val	Thr	Ala	Ala	Val	Met	Val	Leu	Leu	Ala	Pro
	180						185					190			
Arg	Gly	Arg	Val	Pro	Lys	Asp	Arg	Ser	Trp	Lys	Ala	Ala	Lys	Val	Phe
	195					200					205				
Met	Gly	Lys	Val	Asp	Asp	Phe	Leu	Gln	Ala	Leu	Ile	Asn	Tyr	Asp	Lys
	210				215					220					
Glu	His	Ile	Pro	Glu	Asn	Cys	Leu	Lys	Val	Val	Asn	Glu	His	Tyr	Leu
225					230				235					240	
Lys	Asp	Pro	Glu	Phe	Asn	Pro	Asn	Leu	Ile	Arg	Thr	Lys	Ser	Phe	Ala
			245					250					255		
Ala	Ala	Gly	Leu	Cys	Ala	Trp	Val	Ile	Asn	Ile	Ile	Lys	Phe	Tyr	Glu
		260					265					270			
Val	Tyr	Cys	Asp	Val	Glu	Pro	Lys	Arg	Gln	Ala	Leu	Ala	Gln	Ala	Asn
	275					280					285				
Leu	Glu	Leu	Ala	Ala	Ala	Thr	Glu	Lys	Leu	Glu	Ala	Ile	Arg	Lys	Lys
	290				295				300						
Leu	Val	Val	Ser	Ala	Asn	Tyr	Asp	Ile	Glu	Lys	Ser	Glu	Lys	Ile	Arg
305					310				315					320	
Trp	Gly	Gln	Ser	Ile	Lys	Ser	Phe	Glu	Ala	Gln	Glu	Lys	Thr	Leu	Cys
			325					330					335		
Gly	Asp	Val	Leu	Leu	Thr	Ala	Ala	Phe	Val	Ser	Tyr	Val	Gly	Pro	Phe

4803

770 775 780
 Trp Val Glu Ser Glu Cys Pro Glu Lys Glu Lys Leu Pro Gln Glu Trp
 785 790 795 800
 Lys Lys Lys Ser Leu Ile Gln Lys Leu Ile Leu Leu Arg Ala Met Arg
 805 810 815
 Pro Asp Arg Met Thr Tyr Ala Leu Arg Asn Phe Val Glu Glu Lys Leu
 820 825 830
 Gly Ala Lys Tyr Val Glu Arg Thr Arg Leu Asp Leu Val Lys Ala Phe
 835 840 845
 Glu Glu Ser Ser Pro Ala Thr Pro Ile Phe Phe Ile Leu Ser Pro Gly
 850 855 860
 Val Asp Ala Leu Lys Asp Leu Glu Ile Leu Gly Lys Arg Leu Gly Phe
 865 870 875 880
 Thr Ile Asp Ser Gly Lys Phe His Asn Val Ser Leu Gly Gln Gly Gln
 885 890 895
 Glu Thr Val Ala Glu Val Ala Leu Glu Lys Ala Ser Lys Gly Gly His
 900 905 910
 Trp Val Ile Leu Gln Asn Val His Leu Val Ala Lys Trp Leu Gly Thr
 915 920 925
 Leu Glu Lys Leu Leu Glu Arg Phe Ser Gln Gly Ser His Arg Asp Tyr
 930 935 940
 Arg Val Phe Met Ser Ala Glu Ser Ala Pro Thr Pro Asp Glu His Ile
 945 950 955 960
 Ile Pro Gln Gly Leu Leu Glu Asn Ser Ile Lys Ile Thr Asn Glu Pro
 965 970 975
 Pro Thr Gly Met Leu Ala Asn Leu His Ala Ala Leu Tyr Asn Phe Asp
 980 985 990
 Gln Val Arg Lys Arg Ser Arg Leu Gly Arg Gln
 995 1000

<210> 5619
 <211> 1219
 <212> DNA
 <213> Homo sapiens

<400> 5619
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 tagccctacc ggactacgag tatctggctc agcgacatgt cctcacctac atggaggatg
 120
 cagtgtgcc a gctgctagaa aacagggaag atattagcca atatggaatt gccaggttct
 180
 tcaactgaata ttttaacagt gtatgccagg gaacacacat tctctttcga gaattcagct
 240
 tcgtccaagc cccccccac aatagggtat catttttacg ggccttctgg agatgcttcc
 300
 gaactgtggg caaaaatggc gatttgctga ccatgaaaga atatcactgt ttgctgcaat
 360
 tactgtgtcc tgatttcccg ctggagctca ctcagaaagc agccaggatt gtgctcatgg
 420
 acgatgccat ggactgcttg atgtcttttt cagatttcct ctttgccttc cagatccagt
 480
 tttactactc agaattcctg gacagtgtgg ctgccatcta tgaggacctg ctgtcaggca
 540

agaaccccaa cacagtgatt gtgccgacgt cgtccagtgg gcagcaccgc caacgacctg
 600
 ccttgggcgg ggccggcacg ctggagggcg tggaggcgtc gctgttctac cagtgtctgg
 660
 aaaacctgtg tgatcggcac aagtacagct gcccaccccc agcacttgct aaagaggccc
 720
 tcagcaatgt tcagagactg accttctatg gattcctcat ggctctctca aagcaccgtg
 780
 gaatcaacca agccctcggg aagtcagagc taagcagccg tcagcctctc ctgccgcaca
 840
 acacagggag cagctggcct ctggttagcaa cacggctcca gagggaagg ggcacacca
 900
 tctctgcctt gacttcccag ggccggactc aatcccaggg agcaggaata tggcgacaaa
 960
 acatggctct tacacattcc catggtaggg gacagccctc cctgcctgca gccctgcccc
 1020
 aacatgaaac cacctcccca tagcagaagc gccagcccc tcctcagaga accccagctc
 1080
 tgctttgggg agcagcctgc aggtcgggca gacacaggac tatttactca gtgacgctag
 1140
 agattatata tcagagagac ctgaatccca ttataaaca aggcaaaggt gtgtctgcgg
 1200
 agaccttttt tccaagctg
 1219

<210> 5620

<211> 333

<212> PRT

<213> Homo sapiens

<400> 5620

Met	Leu	Ser	Pro	Glu	Arg	Leu	Ala	Leu	Pro	Asp	Tyr	Glu	Tyr	Leu	Ala
1				5					10					15	
Gln	Arg	His	Val	Leu	Thr	Tyr	Met	Glu	Asp	Ala	Val	Cys	Gln	Leu	Leu
			20					25					30		
Glu	Asn	Arg	Glu	Asp	Ile	Ser	Gln	Tyr	Gly	Ile	Ala	Arg	Phe	Phe	Thr
			35				40					45			
Glu	Tyr	Phe	Asn	Ser	Val	Cys	Gln	Gly	Thr	His	Ile	Leu	Phe	Arg	Glu
	50					55					60				
Phe	Ser	Phe	Val	Gln	Ala	Thr	Pro	His	Asn	Arg	Val	Ser	Phe	Leu	Arg
65					70				75						80
Ala	Phe	Trp	Arg	Cys	Phe	Arg	Thr	Val	Gly	Lys	Asn	Gly	Asp	Leu	Leu
			85						90					95	
Thr	Met	Lys	Glu	Tyr	His	Cys	Leu	Leu	Gln	Leu	Leu	Cys	Pro	Asp	Phe
			100					105					110		
Pro	Leu	Glu	Leu	Thr	Gln	Lys	Ala	Ala	Arg	Ile	Val	Leu	Met	Asp	Asp
			115				120					125			
Ala	Met	Asp	Cys	Leu	Met	Ser	Phe	Ser	Asp	Phe	Leu	Phe	Ala	Phe	Gln
			130				135					140			
Ile	Gln	Phe	Tyr	Tyr	Ser	Glu	Phe	Leu	Asp	Ser	Val	Ala	Ala	Ile	Tyr
145					150					155					160
Glu	Asp	Leu	Leu	Ser	Gly	Lys	Asn	Pro	Asn	Thr	Val	Ile	Val	Pro	Thr
			165					170						175	
Ser	Ser	Ser	Gly	Gln	His	Arg	Gln	Arg	Pro	Ala	Leu	Gly	Gly	Ala	Gly

```

      180      185      190
Thr Leu Glu Gly Val Glu Ala Ser Leu Phe Tyr Gln Cys Leu Glu Asn
      195      200      205
Leu Cys Asp Arg His Lys Tyr Ser Cys Pro Pro Pro Ala Leu Val Lys
      210      215      220
Glu Ala Leu Ser Asn Val Gln Arg Leu Thr Phe Tyr Gly Phe Leu Met
      225      230      235      240
Ala Leu Ser Lys His Arg Gly Ile Asn Gln Ala Leu Gly Lys Ser Glu
      245      250      255
Leu Ser Ser Arg Gln Pro Leu Leu Pro His Asn Thr Gly Ser Ser Trp
      260      265      270
Pro Leu Leu Ala Thr Arg Leu Gln Arg Gly Arg Gly Ile Thr Ile Ser
      275      280      285
Ala Leu Thr Ser Gln Gly Arg Thr Gln Ser Gln Gly Ala Gly Ile Trp
      290      295      300
Arg Gln Asn Met Ala Leu Thr His Ser His Gly Arg Gly Gln Pro Ser
      305      310      315      320
Leu Pro Ala Ala Leu Pro Gln His Glu Thr Thr Ser Pro
      325      330

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<210> 5621

<211> 456

<212> DNA

<213> Homo sapiens

<400> 5621

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ttttgtgtaa atagaattta ttgtggctct gattatgtac acgtgagatg gcctggctgg
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gccggccggg ctcacatggt ttgtacaata aatacatctg tggggcgggc tctccgcagc
120
cggaagggc caccgccacg gttcagtcga gttccgggc tcccagcttc atggggccct
180
tgccacctt cctctcggcg cgtttggcct ccattctccg ccgccgctcc tcgcgttct
240
tccgggccag ctcagccttg acctgtcctg ggtgctggga cgtgcagaca gggtagcgaa
300
ggggtcgccc ttgtcgctgg actctggggc accccagtta tactcgctgg ccagccgtgt
360
accgtcagga ggtggctcct gggagcttgg ctgaaccgt gccgggtggcc cttcccggt
420
gcggagagcc cgccccacag atgtatttat tgtaca
456

```

<210> 5622

<211> 82

<212> PRT

<213> Homo sapiens

<400> 5622

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Met Ala Trp Leu Gly Arg Pro Gly Ser His Gly Leu Tyr Asn Lys Tyr
1      5      10      15
Ile Cys Gly Ala Gly Ser Pro Gln Pro Gly Arg Ala Thr Ala Thr Val
20      25      30
Gln Ser Ser Phe Arg Ala Pro Ser Phe Met Gly Pro Leu Ala Thr Phe

```

35 40 45
 Leu Ser Ala Arg Leu Ala Ser Ile Ser Arg Arg Arg Ser Ser Arg Phe
 50 55 60
 Phe Arg Ala Ser Ser Ala Leu Thr Cys Pro Gly Cys Trp Asp Val Gln
 65 70 75 80
 Thr Gly

<210> 5623
 <211> 357
 <212> DNA
 <213> Homo sapiens

<400> 5623
 nctggaagaa ctcgtcatgc tctttgtagc gtggtgcttc tgttgctcac aggacaactt
 60
 gcctttgatg attttcaaga gagttgtgct atgatgtggc aaaagtatgc aggaagcagg
 120
 cggccaatgc ctctgggagc aaggatcctt ttccacgggtg tgttctatgc cgggggcttt
 180
 gccattgtgt attacctcat tcaaaagttt cattccaggg ctttatatta caagttggca
 240
 gtggagcagc tgcagagcca tcccagggca caggaagctc tgggccctcc tctcaacatc
 300
 cattatctca agctcatcga cagggaaaac ttcgtggaca ttgttgatgc caagttg
 357

<210> 5624
 <211> 88
 <212> PRT
 <213> Homo sapiens

<400> 5624
 Met Trp Gln Lys Tyr Ala Gly Ser Arg Arg Ser Met Pro Leu Gly Ala
 1 5 10 15
 Arg Ile Leu Phe His Gly Val Phe Tyr Ala Gly Gly Phe Ala Ile Val
 20 25 30
 Tyr Tyr Leu Ile Gln Lys Phe His Ser Arg Ala Leu Tyr Tyr Lys Leu
 35 40 45
 Ala Val Glu Gln Leu Gln Ser His Pro Glu Ala Gln Glu Ala Leu Gly
 50 55 60
 Pro Pro Leu Asn Ile His Tyr Leu Lys Leu Ile Asp Arg Glu Asn Phe
 65 70 75 80
 Val Asp Ile Val Asp Ala Lys Leu
 85

<210> 5625
 <211> 1017
 <212> DNA
 <213> Homo sapiens

<400> 5625
 gccgactcgt ggtacctggc gcttctgggc ttcgctgagc acttccgcac ttccagcccc
 60

cccaaaatcc gcctgtgcgt gcactgcctg caggccgtgt tccccttcaa gccgccgcag
 120
 cgcacgcagg cccgtacaca cctgcagctg ggctccgttc tctatcacca caccaagaac
 180
 agcgcagcagg cgcgcagcca cctggagaag gcgtgggtga tatcacagca aatcccacag
 240
 ttcgaagatg ttaaatttga agcagcaagt ctgttgctctg aattgtactg tcaagagaat
 300
 tccgttgatg cagcaaagcc gctgctgcgg aaggcgatcc agatctcaca gcagacccca
 360
 tattggcact gccgcctgct cttccagctc gctcaactgc acacgcttga gaaggacctg
 420
 gtgtcggcct gtgacctcct ggggtgtaggg gccgagtacg cccgggtggt gggatctgaa
 480
 tacacacggg cgctgttcct cctcagcaag gggatgctgc tgetgatgga gcgaaagctg
 540
 caggaggtgc acccgctgct gaccctctgc gggcagatcg tggagaactg gcaggggaac
 600
 cccatccaga aggatcgct gcgtgtcttc ttctgggtgc tccaggtcac ccactatctg
 660
 gatgccgggc aggtgaagag cgtgaagccg tgtctgaagc agctgcagca gtgcatccag
 720
 accatctcca cactgcacga tgatgagatc ctgcccagca acccgctga cctcttccac
 780
 tggctgcca aggagcacat gtgtgtgctt gtctacctgg tgactgtgat gcactccatg
 840
 caggccggct acctggagaa ggcgcagaag tacacggaca aggccctcat gcagctggag
 900
 aagctcaaga tgctggactg cagccccatc ctgtcatcct tccaagtgat cctgctggag
 960
 cacatcatca tgtgccgct tgtcacgggt cacaaggcca cggcgctgca ggagatc
 1017

<210> 5626

<211> 339

<212> PRT

<213> Homo sapiens

<400> 5626

Ala	Asp	Ser	Trp	Tyr	Leu	Ala	Leu	Leu	Gly	Phe	Ala	Glu	His	Phe	Arg
1				5					10					15	
Thr	Ser	Ser	Pro	Pro	Lys	Ile	Arg	Leu	Cys	Val	His	Cys	Leu	Gln	Ala
			20					25					30		
Val	Phe	Pro	Phe	Lys	Pro	Pro	Gln	Arg	Ile	Glu	Ala	Arg	Thr	His	Leu
		35					40					45			
Gln	Leu	Gly	Ser	Val	Leu	Tyr	His	His	Thr	Lys	Asn	Ser	Glu	Gln	Ala
		50				55					60				
Arg	Ser	His	Leu	Glu	Lys	Ala	Trp	Leu	Ile	Ser	Gln	Gln	Ile	Pro	Gln
65					70				75				80		
Phe	Glu	Asp	Val	Lys	Phe	Glu	Ala	Ala	Ser	Leu	Leu	Ser	Glu	Leu	Tyr
			85					90					95		
Cys	Gln	Glu	Asn	Ser	Val	Asp	Ala	Ala	Lys	Pro	Leu	Leu	Arg	Lys	Ala
			100					105					110		
Ile	Gln	Ile	Ser	Gln	Gln	Thr	Pro	Tyr	Trp	His	Cys	Arg	Leu	Leu	Phe

```
<210> 5627
<211> 1401
<212> DNA
<213> Homo sapiens
```

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<400> 5627
nctctcacac tgtggaattc tctctatcag cctcaaagtc cagatttgga aaggggagtct
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cagcgaggggg cagcagctgg cccaacccgg aggcagagcg gcaactgaac tctagccggg
120
aagagccagg gttatgtgca catgggaggt ggggaggaca ggggctgtat gtgacctca
180
catctgttcc tcgcgccccca gatggcttct gctgcctgct ccatggaccc catcgacagc
240
tttgagctcc tggatctcct gtttgaccgg caggacggca tcctgagaca cgtggagctg
300
ggcgaggggct ggggtcacgt caaggaccag gtccctgccaa accccgactc tgacgacttc
360
ctcagctcca tcctgggctc tggagactca ctgcccagct cccactctg gtccccgaa
420
ggcagtgata gtggcatctc cgaagacctc ccctccgacc ccaggacac ccctccacgc
480
agcggaccag ccacctcccc cgccggctgc catcctgccc agcctggcaa ggggccctgc
540
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ctctcctatc atcctggcaa ctcttgctcc accacaaccc cagggccagt gatccaacaa
 600
 cagcatcacc tgggggcctc ctacctcctg cgacctgggg ctgggcactg tcaggagctg
 660
 gtgctcaccg aggatgagaa gaagctgctg gctaaagaag gcatcacctt gccactcag
 720
 ctgccccctca ctaagtacga ggagcgagtg ctgaaaaaaa tccgccggaa aatccggaac
 780
 aagcagtcgg cgcaagaaag caggaagaag aagaaggaat atatcgatgg cctgggagact
 840
 cgggtcctgtt gctgtccttt gccctcatca tcttccctc catcagccct tttggcccc
 900
 acaaaaccga gagccctggg gactttgcgc ctgtacgagt gttctccaga actttgcaca
 960
 acgatgctgc ctcccgctg gctgctgatg ctgtgccagg ctccgaggcc ccaggacccc
 1020
 gaccgagggc tgacacaacc cgagaagagt ctccaggaag ccccggggca gactggggct
 1080
 tccaggacac cgcgaacctg accaattcga cggaggagct ggacaacgcc accctgggtc
 1140
 tgaggaatgc aacagagggg ctgggccagg tcgccctgct ggactgggtg gcgcctgggc
 1200
 cgagcactgg ctcaggacgt gcagggtg aggcggcggg agacgagctg tgagccccac
 1260
 caggactatg ctcccaggcc cctctgcccc ggggtgcctt ggggatgctg cactgggcag
 1320
 ctaccacctt ggggatggga cgtgaggcca agacccagc agagatgcca gaatggggga
 1380
 ggcacagctc atagccacac a
 1401

<210> 5628

<211> 299

<212> PRT

<213> Homo sapiens

<400> 5628

Met	Ala	Ser	Ala	Ala	Cys	Ser	Met	Asp	Pro	Ile	Asp	Ser	Phe	Glu	Leu
1				5					10					15	
Leu	Asp	Leu	Leu	Phe	Asp	Arg	Gln	Asp	Gly	Ile	Leu	Arg	His	Val	Glu
			20					25					30		
Leu	Gly	Glu	Gly	Trp	Gly	His	Val	Lys	Asp	Gln	Val	Leu	Pro	Asn	Pro
		35					40					45			
Asp	Ser	Asp	Asp	Phe	Leu	Ser	Ser	Ile	Leu	Gly	Ser	Gly	Asp	Ser	Leu
	50					55					60				
Pro	Ser	Ser	Pro	Leu	Trp	Ser	Pro	Glu	Gly	Ser	Asp	Ser	Gly	Ile	Ser
65					70					75				80	
Glu	Asp	Leu	Pro	Ser	Asp	Pro	Gln	Asp	Thr	Pro	Pro	Arg	Ser	Gly	Pro
			85						90					95	
Ala	Thr	Ser	Pro	Ala	Gly	Cys	His	Pro	Ala	Gln	Pro	Gly	Lys	Gly	Pro
			100					105						110	
Cys	Leu	Ser	Tyr	His	Pro	Gly	Asn	Ser	Cys	Ser	Thr	Thr	Thr	Pro	Gly
		115					120						125		
Pro	Val	Ile	Gln	Gln	Gln	His	His	Leu	Gly	Ala	Ser	Tyr	Leu	Leu	Arg

```

      130              135              140
Pro Gly Ala Gly His Cys Gln Glu Leu Val Leu Thr Glu Asp Glu Lys
145              150              155              160
Lys Leu Leu Ala Lys Glu Gly Ile Thr Leu Pro Thr Gln Leu Pro Leu
      165              170              175
Thr Lys Tyr Glu Glu Arg Val Leu Lys Lys Ile Arg Arg Lys Ile Arg
      180              185              190
Asn Lys Gln Ser Ala Gln Glu Ser Arg Lys Lys Lys Lys Glu Tyr Ile
      195              200              205
Asp Gly Leu Glu Thr Arg Ser Cys Cys Cys Pro Leu Pro Ser Ser Ser
      210              215              220
Ser Pro Pro Ser Ala Leu Leu Ala Pro Thr Lys Pro Arg Ala Leu Gly
225              230              235              240
Thr Leu Arg Leu Tyr Glu Cys Ser Pro Glu Leu Cys Thr Thr Met Leu
      245              250              255
Pro Pro Ala Trp Leu Leu Met Leu Cys Gln Ala Pro Arg Pro Gln Asp
      260              265              270
Pro Asp Pro Arg Leu Thr Gln Pro Glu Lys Ser Leu Gln Glu Ala Pro
      275              280              285
Gly Gln Thr Gly Ala Ser Arg Thr Pro Arg Thr
      290              295

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<210> 5629
 <211> 428
 <212> DNA
 <213> Homo sapiens

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<400> 5629
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aacagaagat aaagctgggg cttacagaga atgtacaact tggcccaggg cacaccagtt
120
agccatcagg ggcagngctg ctattcaggt ctgggactgt gggactccag agcccatggt
180
ttttacgagg atgccatact gccacaatgg atggtgtctt tatctcctga tatatgattg
240
tgtgttggga ggcgtggggg ggcagctgga agaattggaga ggcataattg tggaggatct
300
tccccattc tctgtaccc tctctggag ctcccagttc catctgagaa attatctact
360
ctgagaaatc gtcacaacac agcatggttg tgagtgcagt ggcagaagcc tgtgcctggt
420
tgtatggg
428

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<210> 5630
 <211> 110
 <212> PRT
 <213> Homo sapiens

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<400> 5630
Met Asp Gly Arg His Thr Gln Ser Pro Leu Thr Glu Asp Lys Ala Gly
1          5          10          15
Ala Tyr Arg Glu Cys Thr Thr Trp Pro Arg Ala His Gln Leu Ala Ile

```

<400> 5632
Met Gly Val Pro Trp Ala Trp Arg Arg Gln Gln Glu Gly Val Thr Gly


```

      1           5           10           15
Ala Gly Ala Gly Ala Gly His Leu Thr Pro Gln Ala Ser Pro Thr Ser
      20           25           30
Glu Leu Pro Thr Ala Lys Thr Pro Gly Glu Ala Gly Arg Gly Gly Val
      35           40           45
Arg Gly Lys Glu Gly Leu Cys Glu Ser Lys Pro His Pro Gln Ser Arg
      50           55           60
Ala Glu Thr Gln Val Cys Lys Ser His Pro Pro Pro Thr Ser Ser Ser
      65           70           75           80
Phe Glu Ala Ser Ser Thr Arg Gly Arg Ala Gly Ala Ala Gln Arg Pro
      85           90           95
Glu Lys Gly Lys Pro His Arg Arg Lys Leu Lys Ala Ser Val Pro Cys
      100          105          110
Val Ser Ala Glu Arg Val Asn Gly Pro Lys Gly Ser Ser Leu Gln Thr
      115          120          125
Ala Arg Ile His Pro Thr Gly Gly His Arg Thr Arg Pro Gly Pro Ser
      130          135          140
Ala Ser Val Pro Val Gln Pro Thr Pro Val Gln Pro Gly Ala Leu Ser
      145          150          155          160
Asp Leu Thr Thr Arg Val Pro Ser Thr Cys Val His Thr Gln Met Gln
      165          170          175
Glu Arg Thr His Thr Thr Val
      180

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<210> 5633

<211> 2181

<212> DNA

<213> Homo sapiens

<400> 5633

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gccaatgtcc ctgtggccac tcagctgaga ccgagggcga cctgggcagc tgcgggtgtc
60
tgtcacctcc gtgtcccaca tagatgccag gctctgcttc tgtgggtctg gaggtcatta
120
gtcaattgta tgtggtgctg tctgtcctcc tgattgcaga ggaggaagga accccttaaa
180
tgagcgggtt ctgagtgtg gggccgctgg tctgctctgc ctggtgggat tctccagtgc
240
tggcttcac tgtgccccag cccactctc accaacaagg agggcgtgaa aatgacaagg
300
aatccatccc tagagttcac aggagatcta gggcagagtt tccaagctgc agctgctctg
360
gccctgtgtg agctgctgct ctgaggaagc ccagagctga ggtagctacc aggcggaggg
420
tgggtttgga ggcctccaca tcaggaatt gagcggtagg ggtttcagcc ttcacgttgg
480
tcgccgact gtatgggaag tggggtctgg ggtctgcttg ccagttctca ccgtcctctt
540
cctccccaaa gccgcctgga taaggggctg gccgcactgg tgcgggagcg tggcgcggtg
600
ctggtggtca tcgagggcat gggcgtgct gtccacacaa actaccacgc agccctgcgc
660
tgcgagagcc tcaagctggc cgtcatcaag aacgcgtggc tggccgagcg gctgggaggc
720

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cggtctttca ggcctatctt caagtacgag gtcccagccg agtgaggcgc tgcagctgcc
780
ggactcttct gcttgctact tgtccgagtg gcttcagaga ttaaaggggc cccctcataa
840
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900
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<210> 5634

<211> 289

<212> PRT

<213> Homo sapiens

<400> 5634

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Val Ala Leu Arg Cys Phe Pro Gly Val Val Arg Ser Leu Asp Ala Leu
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Gly Trp Glu Glu Arg Gln Leu Ala Leu Val Lys Gly Leu Leu Ala Gly
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Asp Pro Tyr Phe Gly Phe Glu Glu Ala Lys Arg Lys Leu Gln Glu Arg
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Pro Trp Leu Val Asp Ser Tyr Ser Glu Trp Leu Gln Arg Leu Lys Gly
          115          120          125
Pro Pro His Lys Cys Ala Leu Ile Phe Ala Asp Asn Ser Gly Ile Asp
          130          135          140
Ile Ile Leu Gly Val Phe Pro Phe Val Arg Glu Leu Leu Leu Arg Gly
145          150          155          160
Thr Glu Val Ile Leu Ala Cys Asn Ser Gly Pro Ala Leu Asn Asp Val
          165          170          175
Thr His Ser Glu Ser Leu Ile Val Ala Glu Arg Ile Ala Gly Met Asp
          180          185          190
Pro Val Val His Ser Ala Leu Gln Glu Glu Arg Leu Leu Leu Val Gln
          195          200          205
Thr Gly Ser Ser Ser Pro Cys Leu Asp Leu Ser Arg Leu Asp Lys Gly
          210          215          220
Leu Ala Ala Leu Val Arg Glu Arg Gly Ala Asp Leu Val Val Ile Glu
225          230          235          240
Gly Met Gly Arg Ala Val His Thr Asn Tyr His Ala Ala Leu Arg Cys
          245          250          255
Glu Ser Leu Lys Leu Ala Val Ile Lys Asn Ala Trp Leu Ala Glu Arg
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<210> 5635

<211> 614

<212> DNA

<213> Homo sapiens

<400> 5635

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180

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<210> 5636

<211> 204

<212> PRT

<213> Homo sapiens

<400> 5636

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			20					25					30		
Asn	Thr	Thr	Thr	Lys	Phe	Arg	Lys	Ala	Leu	Ile	Asn	Gly	Asp	Glu	Asn
			35				40					45			
Leu	Ala	Cys	Gln	Ile	Tyr	Glu	Asn	Asn	Pro	Gln	Leu	Lys	Glu	Ser	Leu
	50					55				60					
Asp	Pro	Asn	Thr	Ser	Tyr	Gly	Glu	Pro	Tyr	Gln	His	Asn	Thr	Pro	Leu
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His	Tyr	Ala	Ala	Arg	His	Gly	Met	Asn	Lys	Ile	Leu	Gly	Asp	Asp	Phe
			85					90					95		
Arg	Arg	Ala	Asp	Cys	Leu	Gln	Met	Ile	Leu	Lys	Trp	Lys	Gly	Ala	Lys
			100					105					110		
Leu	Asp	Gln	Gly	Glu	Tyr	Glu	Arg	Ala	Ala	Ile	Asp	Ala	Val	Asp	Asn
		115					120					125			
Lys	Lys	Asn	Thr	Pro	Leu	His	Tyr	Ala	Ala	Ala	Ser	Gly	Met	Lys	Ala
		130				135					140				
Cys	Val	Glu	Lys	His	Gly	Gly	Asp	Leu	Phe	Ala	Glu	Asn	Glu	Asn	Lys
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Leu	Asn	Leu	Glu	Ser	Gln	Met	Val	Phe	Ser	Arg	Asp	Pro	Glu	Ala	Glu
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<210> 5637

<211> 825

<212> DNA

<213> Homo sapiens

<400> 5637

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<210> 5638

<211> 132

<212> PRT

<213> Homo sapiens

<400> 5638

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Leu	Asn	Ile	Asn	Lys	Ser	Asp	Ser	His	Ser	Pro	Thr	Val	Leu	Ala	Ser
			20					25					30		
Leu	Thr	Gly	Ala	Arg	Trp	Phe	Cys	Asp	Pro	Ser	Gln	Ala	His	Ala	Pro
		35					40					45			
Leu	Ala	Gly	Arg	Leu	Ala	Arg	Ala	Pro	Leu	Trp	Leu	Ala	Cys	Gly	Asp
		50				55					60				
Thr	Trp	Ala	Leu	Leu	His	Val	Pro	Thr	Arg	Ala	Val	Ala	Gly	Ser	Lys
65					70				75					80	
Glu	Ala	Gln	Pro	Arg	Pro	Ala	Cys	Val	Asp	Pro	Ala	Gly	Leu	Arg	Ala
			85						90				95		
Pro	Glu	Leu	Leu	Thr	Val	Ser	Glu	Pro	Gly	Cys	Pro	Ala	Pro	Arg	Arg
			100					105					110		
Pro	Pro	Ser	Ser	Cys	Pro	Ala	Trp	Asp	Pro	Ser	Ala	Val	Cys	Leu	Leu
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130

<210> 5639

<211> 2433

<212> DNA

<213> Homo sapiens

<400> 5639

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<210> 5640

<211> 540

<212> PRT

<213> Homo sapiens

<400> 5640

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		20					25					30			
Ala	Ser	Ala	Pro	Gln	Glu	Lys	Leu	Ser	Ser	Glu	Val	Glu	Asp	Pro	Pro
		35				40					45				
Pro	Tyr	Leu	Met	Met	Asp	Glu	Leu	Leu	Gly	Arg	Gln	Arg	Lys	Val	Tyr
	50				55				60						
Leu	Glu	Thr	Tyr	Gly	Cys	Gln	Met	Asn	Val	Asn	Asp	Thr	Glu	Ile	Ala
65				70				75					80		
Trp	Ser	Ile	Leu	Gln	Lys	Ser	Gly	Tyr	Leu	Arg	Pro	Val	Thr	Ser	Lys

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 Ala Asp Val Ile Leu Leu Val Thr Cys Ser Ile Arg Glu Lys Ala Glu
 100 105 110
 Gln Thr Ile Trp Asn Arg Leu His Gln Leu Lys Ala Leu Lys Thr Arg
 115 120 125
 Arg Pro Arg Ser Arg Val Pro Leu Arg Ile Gly Ile Leu Gly Cys Met
 130 135 140
 Ala Glu Arg Leu Lys Glu Glu Ile Leu Asn Arg Glu Lys Met Val Asp
 145 150 155 160
 Ile Leu Ala Gly Pro Asp Ala Tyr Arg Asp Leu Pro Arg Leu Leu Ala
 165 170 175
 Val Ala Glu Ser Gly Gln Gln Ala Ala Asn Val Leu Leu Ser Leu Asp
 180 185 190
 Glu Thr Tyr Ala Asp Val Met Pro Val Gln Thr Ser Ala Ser Ala Thr
 195 200 205
 Ser Ala Phe Val Ser Ile Met Arg Gly Cys Asp Asn Met Cys Ser Tyr
 210 215 220
 Cys Ile Val Pro Phe Thr Arg Gly Arg Glu Arg Ser Arg Pro Ile Ala
 225 230 235 240
 Ser Ile Leu Glu Glu Val Lys Lys Leu Ser Glu Gln Gly Leu Lys Glu
 245 250 255
 Val Thr Leu Leu Gly Gln Asn Val Asn Ser Phe Arg Asp Asn Ser Glu
 260 265 270
 Val Gln Phe Asn Ser Ala Val Pro Thr Asn Leu Ser Arg Gly Phe Thr
 275 280 285
 Thr Asn Tyr Lys Thr Lys Gln Gly Gly Leu Arg Phe Ala His Leu Leu
 290 295 300
 Asp Gln Val Ser Arg Val Asp Pro Glu Met Arg Ile Arg Phe Thr Ser
 305 310 315 320
 Pro His Pro Lys Asp Phe Pro Asp Glu Val Leu Gln Leu Ile His Glu
 325 330 335
 Arg Asp Asn Ile Cys Lys Gln Ile His Leu Pro Ala Gln Ser Gly Ser
 340 345 350
 Ser Arg Val Leu Glu Ala Met Arg Arg Gly Tyr Ser Arg Glu Ala Tyr
 355 360 365
 Val Glu Leu Val His His Ile Arg Glu Ser Ile Pro Gly Val Ser Leu
 370 375 380
 Ser Ser Asp Phe Ile Ala Gly Phe Cys Gly Glu Thr Glu Glu Asp His
 385 390 395 400
 Val Gln Thr Val Ser Leu Leu Arg Glu Val Gln Tyr Asn Met Gly Phe
 405 410 415
 Leu Phe Ala Tyr Ser Met Arg Gln Lys Thr Arg Ala Tyr His Arg Leu
 420 425 430
 Lys Asp Asp Val Pro Glu Glu Val Lys Leu Arg Arg Leu Glu Glu Leu
 435 440 445
 Ile Thr Ile Phe Arg Glu Glu Ala Thr Lys Ala Asn Gln Thr Ser Val
 450 455 460
 Gly Cys Thr Gln Leu Val Leu Val Glu Gly Leu Ser Lys Arg Ser Ala
 465 470 475 480
 Thr Asp Leu Cys Gly Arg Asn Asp Gly Asn Leu Lys Val Ile Phe Pro
 485 490 495
 Asp Ala Glu Met Glu Asp Val Asn Asn Pro Gly Leu Arg Val Arg Ala
 500 505 510
 Gln Pro Gly Asp Tyr Val Leu Val Lys Ile Thr Xaa Gln Pro Val Leu

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 Arg His Leu Gly Asp Met Phe Ser Ala Gly Pro Leu
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<210> 5641
 <211> 293
 <212> DNA
 <213> Homo sapiens

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<210> 5642
 <211> 87
 <212> PRT
 <213> Homo sapiens

<400> 5642
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 20 25 30
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 35 40 45
 Ala Gly Ala Pro Leu Ala Ser Leu Glu Ser Gln Val Arg Arg Ala Asp
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 Thr Ser Arg Asn Ser Ser Gln Cys Ser Arg Ser Leu Gly Arg Pro Thr
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 Ser Pro Leu His Pro Thr Ala
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<210> 5643
 <211> 1218
 <212> DNA
 <213> Homo sapiens

<400> 5643
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<211> 202

<212> PRT

<213> Homo sapiens

<400> 5644

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			20					25					30		
Ser	Arg	Leu	Ile	Glu	Lys	Glu	Cys	Leu	Glu	Lys	Glu	Ser	Arg	Asp	Tyr
		35				40						45			
Asp	Val	Asp	His	Pro	Gly	Glu	Ala	Asp	Ser	Val	Leu	Arg	Gly	Ser	Ser
	50					55					60				
Gln	Val	Gln	Ala	Arg	Gly	Arg	Ala	Leu	Asn	Ile	Val	Asp	Gln	Glu	Gly
65					70					75				80	
Ser	Leu	Leu	Gly	Lys	Gly	Glu	Thr	Gln	Gly	Leu	Leu	Thr	Ala	Lys	Gly
			85					90						95	
Gly	Val	Gly	Lys	Leu	Val	Thr	Leu	Arg	Asn	Val	Ser	Thr	Lys	Lys	Ile

100	105	110
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Gln Lys Asn Thr Pro Ser Pro	Asp Val Thr Leu Gly Thr	Asn Pro Gly
130	135	140
Thr Glu Asp Ile Gln Phe Pro	Ile Gln Lys Ile Pro	Leu Gly Leu Asp
145	150	155
Leu Lys Asn Leu Arg Leu Pro	Arg Arg Lys Met Ser Phe	Asp Ile Ile
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Asp Lys Ser Asp Val Phe Ser	Arg Phe Gly Ile Glu Ile	Ile Lys Trp
180	185	190
Ala Gly Phe His Thr Ile Lys	Leu Asp Tyr	
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<210> 5645
 <211> 156
 <212> DNA
 <213> Homo sapiens

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<210> 5646
 <211> 52
 <212> PRT
 <213> Homo sapiens

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<210> 5647
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 <213> Homo sapiens

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 Trp Cys Arg Arg Arg Thr Ala Thr Arg Cys Pro Gly Gly Ala Thr Arg
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 Arg Val Arg Gly Ala Leu Arg Leu Arg Ala Ala Gln Tyr Arg Pro His
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 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Thr Leu Leu Leu Glu Ser Gly Ile Gln Ile His Thr Thr Glu Phe Glu
 50 55 60
 Trp Pro Lys Asn Met Met Pro Ser Ser Phe Ala Met Lys Cys Arg Lys
 65 70 75 80
 His Leu Lys Ser Arg Arg Leu Val Ser Ala Lys Gln Leu Gly Val Asp
 85 90 95
 Arg Ile Val Asp Phe Gln Phe Gly Ser Asp Glu Ala Ala Tyr His Leu
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 Ile Ile Glu Leu Tyr Asp Arg Gly Asn Ile Val Leu Thr Asp Tyr Glu
 115 120 125
 Tyr Val Ile Leu Asn Ile Leu Arg Phe Arg Thr Asp Glu Ala Asp Asp

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<210> 5653

<211> 1439

<212> DNA

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<210> 5654
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 <212> PRT
 <213> Homo sapiens

<400> 5654
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 Gly Tyr Asp Gly Leu Pro Gly Pro Lys Gly Glu Pro Gly Ile Pro Ala
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 Ile Pro Gly Ile Arg Gly Pro Lys Gly Gln Lys Gly Glu Pro Gly Leu
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 Pro Gly His Pro Gly Lys Asn Gly Pro Met Gly Pro Pro Gly Met Pro
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 Gly Val Pro Gly Pro Met Gly Ile Pro Gly Glu Pro Gly Glu Glu Gly
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 Arg Tyr Lys Gln Lys Phe Gln Ser Val Phe Thr Val Thr Arg Gln Thr
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 His Gln Pro Pro Ala Pro Asn Ser Leu Ile Arg Phe Asn Ala Val Leu
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 Thr Asn Pro Gln Gly Asp Tyr Asp Thr Ser Thr Gly Lys Phe Thr Cys
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 Lys Val Pro Gly Leu Tyr Tyr Phe Val Tyr His Ala Ser His Thr Ala
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 Asn Leu Cys Val Leu Leu Tyr Arg Ser Gly Val Lys Val Val Thr Phe
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 Cys Gly His Thr Ser Lys Thr Asn Gln Val Asn Ser Gly Gly Val Leu
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 <212> DNA
 <213> Homo sapiens

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<210> 5656

<211> 987

<212> PRT

<213> Homo sapiens

<400> 5656

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Ala	Glu	Val	Arg	Arg	Glu	Trp	Ala	Lys	Tyr	Met	Glu	Val	His	Glu	Lys
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Ala	Ser	Phe	Thr	Asn	Ser	Glu	Leu	His	Arg	Ala	Met	Asn	Leu	His	Val
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Gly	Asn	Leu	Arg	Leu	Leu	Ser	Gly	Pro	Leu	Asp	Gln	Val	Arg	Ala	Ala
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Leu	Pro	Thr	Pro	Ala	Leu	Ser	Pro	Glu	Asp	Lys	Ala	Val	Leu	Gln	Asn
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Leu	Lys	Arg	Ile	Leu	Ala	Lys	Val	Gln	Glu	Met	Arg	Asp	Gln	Arg	Val
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Ser	Leu	Glu	Gln	Gln	Leu	Arg	Glu	Leu	Ile	Gln	Lys	Asp	Asp	Ile	Thr
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Ala	Ser	Leu	Val	Thr	Thr	Asp	His	Ser	Glu	Met	Lys	Lys	Leu	Phe	Glu
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Glu	Gln	Leu	Lys	Lys	Tyr	Asp	Gln	Leu	Lys	Val	Tyr	Leu	Glu	Gln	Asn
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Gln	Tyr	Ala	Ala	Val	Arg	Arg	Val	Leu	Ser	Asp	Leu	Asp	Gln	Lys	Trp
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Asn	Ser	Thr	Leu	Gln	Thr	Leu	Val	Ala	Ser	Tyr	Glu	Ala	Tyr	Glu	Asp
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Leu	Met	Lys	Lys	Ser	Gln	Glu	Gly	Arg	Asp	Phe	Tyr	Ala	Asp	Leu	Glu
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Ser	Lys	Val	Ala	Ala	Leu	Leu	Glu	Arg	Thr	Gln	Ser	Thr	Cys	Gln	Ala

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Glu Ser Glu Ala Val Glu Ala Gly Asp Pro Pro Glu Glu Leu Arg Ser
          275          280          285
Leu Pro Pro Asp Met Val Ala Gly Pro Arg Leu Pro Asp Thr Phe Leu
          290          295          300
Gly Ser Ala Thr Pro Leu His Phe Pro Pro Ser Pro Phe Pro Ser Ser
305          310          315          320
Thr Gly Pro Gly Pro His Tyr Leu Ser Gly Pro Leu Pro Pro Gly Thr
          325          330          335
Tyr Ser Gly Pro Thr Gln Leu Ile Gln Pro Arg Ala Pro Gly Pro His
          340          345          350
Ala Met Pro Val Ala Pro Gly Pro Ala Leu Tyr Pro Ala Pro Ala Tyr
          355          360          365
Thr Pro Glu Leu Gly Leu Val Pro Arg Ser Ser Pro Gln His Gly Val
          370          375          380
Val Ser Ser Pro Tyr Val Gly Val Gly Pro Ala Pro Pro Val Ala Gly
385          390          395          400
Leu Pro Ser Ala Pro Pro Pro Gln Phe Ser Gly Pro Glu Leu Ala Met
          405          410          415
Ala Val Arg Pro Ala Thr Thr Thr Val Asp Ser Ile Gln Ala Pro Ile
          420          425          430
Pro Ser His Thr Ala Pro Arg Pro Asn Pro Thr Pro Ala Pro Pro Pro
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Pro Cys Phe Pro Val Pro Pro Pro Gln Pro Leu Pro Thr Pro Tyr Thr
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Tyr Pro Ala Gly Ala Lys Gln Pro Ile Pro Ala Gln His His Phe Ser
465          470          475          480
Ser Gly Ile Pro Thr Gly Phe Pro Ala Pro Arg Ile Gly Pro Gln Pro
          485          490          495
Gln Pro His Pro Gln Pro His Pro Ser Gln Ala Phe Gly Pro Gln Pro
          500          505          510
Pro Gln Gln Pro Leu Pro Leu Gln His Pro His Leu Phe Pro Pro Gln
          515          520          525
Ala Pro Gly Leu Leu Pro Pro Gln Ser Pro Tyr Pro Tyr Ala Pro Gln
          530          535          540
Pro Gly Val Leu Gly Gln Pro Pro Pro Pro Leu His Thr Gln Leu Tyr
545          550          555          560
Pro Gly Pro Ala Gln Asp Pro Leu Pro Ala His Ser Gly Ala Leu Pro
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Phe Pro Ser Pro Gly Pro Pro Gln Pro Pro His Pro Pro Leu Ala Tyr
          580          585          590
Gly Pro Ala Pro Ser Thr Arg Pro Met Gly Pro Gln Ala Ala Pro Leu
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Thr Ile Arg Gly Pro Ser Ser Ala Gly Gln Ser Thr Pro Ser Pro His
          610          615          620
Leu Val Pro Ser Pro Ala Pro Ser Pro Gly Pro Gly Pro Val Pro Pro
625          630          635          640
Arg Pro Pro Ala Ala Glu Pro Pro Pro Cys Leu Arg Arg Gly Ala Ala
          645          650          655
Ala Ala Asp Leu Leu Ser Ser Ser Pro Glu Ser Gln His Gly Gly Thr

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 675 680 685
 Ala Ala Glu Gly Arg Arg Pro Gln Ala Leu Arg Leu Ile Glu Arg Asp
 690 695 700
 Pro Tyr Glu His Pro Glu Arg Leu Arg Gln Leu Gln Gln Glu Leu Glu
 705 710 715 720
 Ala Phe Arg Gly Gln Leu Gly Asp Val Gly Ala Leu Asp Thr Val Trp
 725 730 735
 Arg Glu Leu Gln Asp Ala Gln Glu His Asp Ala Arg Gly Arg Ser Ile
 740 745 750
 Ala Ile Ala Arg Cys Tyr Ser Leu Lys Asn Arg His Gln Asp Val Met
 755 760 765
 Pro Tyr Asp Ser Asn Arg Val Val Leu Arg Ser Gly Lys Asp Asp Tyr
 770 775 780
 Ile Asn Ala Ser Cys Val Glu Gly Leu Ser Pro Tyr Cys Pro Pro Leu
 785 790 795 800
 Val Ala Thr Gln Ala Pro Leu Pro Gly Thr Ala Ala Asp Phe Trp Leu
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 Met Val His Glu Gln Lys Val Ser Val Ile Val Met Leu Val Ser Glu
 820 825 830
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 835 840 845
 Gly Gln Pro Met Val His Gly Ala Leu Ser Leu Ala Leu Ser Ser Val
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 Asp Gln Ser Leu Lys Arg Ser Leu Val His Leu His Phe Pro Thr Trp
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 Gln Glu Val His Ala His Tyr Leu His Gln Arg Pro Leu His Thr Pro
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 945 950 955 960
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<210> 5657

<211> 1020

<212> DNA

<213> Homo sapiens

<400> 5657

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 ggagacaaac tcacagaccg cgacatcatc gtgctgcagc ggggcggtac cggttcgag
 900
 ggctccggag tgaagctgca agcggagaaa tcacggccgg tgatgcaggc ctgagtgtgt
 960
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<210> 5658

<211> 301

<212> PRT

<213> Homo sapiens

<400> 5658

Met	Thr	Arg	His	Gly	Lys	Asn	Cys	Thr	Ala	Gly	Ala	Val	Tyr	Thr	Tyr
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His	Glu	Lys	Lys	Lys	Asp	Thr	Ala	Ala	Ser	Gly	Tyr	Gly	Thr	Gln	Asn
			20					25					30		
Ile	Arg	Leu	Ser	Arg	Asp	Ala	Val	Lys	Asp	Phe	Asp	Cys	Cys	Cys	Leu
		35				40					45				
Ser	Leu	Gln	Pro	Cys	His	Asp	Pro	Val	Val	Thr	Pro	Asp	Gly	Tyr	Leu
	50				55					60					
Tyr	Glu	Arg	Glu	Ala	Ile	Leu	Glu	Tyr	Ile	Leu	His	Gln	Lys	Lys	Glu
65					70				75					80	
Ile	Ala	Arg	Gln	Met	Lys	Ala	Tyr	Glu	Lys	Gln	Arg	Gly	Thr	Arg	Arg
			85					90					95		
Glu	Glu	Gln	Lys	Glu	Leu	Gln	Arg	Ala	Ala	Ser	Gln	Asp	His	Val	Arg
		100						105				110			
Gly	Phe	Leu	Glu	Lys	Glu	Ser	Ala	Ile	Val	Ser	Arg	Pro	Leu	Asn	Pro
	115						120					125			
Phe	Thr	Ala	Lys	Ala	Leu	Ser	Gly	Thr	Ser	Pro	Asp	Asp	Val	Gln	Pro
	130					135					140				
Gly	Pro	Ser	Val	Gly	Pro	Pro	Ser	Lys	Asp	Lys	Asp	Lys	Val	Leu	Pro

145		150		155		160									
Ser	Phe	Trp	Ile	Pro	Ser	Leu	Thr	Pro	Glu	Ala	Lys	Ala	Thr	Lys	Leu
		165		170		175									
Glu	Lys	Pro	Ser	Arg	Thr	Val	Thr	Cys	Pro	Met	Ser	Gly	Lys	Pro	Leu
		180		185		190									
Arg	Met	Ser	Asp	Leu	Thr	Pro	Val	His	Phe	Thr	Pro	Leu	Asp	Ser	Ser
		195		200		205									
Val	Asp	Arg	Val	Gly	Leu	Ile	Thr	Arg	Ser	Glu	Arg	Tyr	Val	Cys	Ala
	210			215		220									
Val	Thr	Arg	Asp	Ser	Leu	Ser	Asn	Ala	Thr	Pro	Cys	Ala	Val	Leu	Arg
	225			230		235									
Pro	Ser	Gly	Ala	Val	Val	Thr	Leu	Glu	Cys	Val	Glu	Lys	Leu	Ile	Arg
		245		250		255									
Lys	Asp	Met	Val	Asp	Pro	Val	Thr	Gly	Asp	Lys	Leu	Thr	Asp	Arg	Asp
		260		265		270									
Ile	Ile	Val	Leu	Gln	Arg	Gly	Gly	Thr	Gly	Phe	Ala	Gly	Ser	Gly	Val
		275		280		285									
Lys	Leu	Gln	Ala	Glu	Lys	Ser	Arg	Pro	Val	Met	Gln	Ala			
	290			295		300									

<210> 5659

<211> 1263

<212> DNA

<213> Homo sapiens

<400> 5659

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120
tcagagaagg ctagatcta tgcattgggt gttattctca gatgcagaga tgtaaatgcc
180
atcttctct tctgttttca ggtcacatgt gccaatata cgaacggtgg aaagtcagaa
240
cttctgaaat caggaagcag caaatccaca ctaaagcaca tatggacaga aagcagcaaa
300
gacttgtcta tcagccgact cctgtcacag acttttcgtg gcaaagagaa tgatacagat
360
ttggacctga gatatgacac ccagaaacct tattctgagc aagacctctg ggactggctg
420
aggaactcca cagaccttca agagcctcgg ccaggggcca agagaaggcc cattgttaaa
480
acgggcaagt ttaagaaaat gtttggatgg ggcgattttc attccaacat caaaacagtg
540
aagctgaacc tggtgataac tgggaaaatt gtagatcatg gcaatgggac atttagtggt
600
tatttcaggc ataattcaac tggtaagggt aatgtatctg tcagcttggt acccctaca
660
aaaatcgtgg aatttgactt ggcacaacaa accgtgattg atgccaaaga ttccaagtct
720
tttaattgtc gcattgaata tgaaaagggt gacaaggcta ccaagaacac actctgcaac
780
tatgaccctt caaaaacctg ttaccaggag caaacccaaa gtcattgtatc ctggctctgc
840

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tccaagccct ttaaggtgat ctgtattttac atttcctttt atagtacaga ttataaactg
 900
 gtacagaaaag tgtgccctga ctacaactac cacagtgaca caccttactt tccctcggga
 960
 tgaaggtgaa catgggggtg agactgaagc ctgaggaatt aaaggtcata tgacagggct
 1020
 gttacctcaa agaagaaggt cacatctgtt gcctggaatg tgtctacact gctgctcttg
 1080
 tcaactggct gcaaaatata ctagtggaaa acactctgat gtaatttctg cccagtcagc
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 1260
 att
 1263

<210> 5660
 <211> 253
 <212> PRT
 <213> Homo sapiens

<400> 5660
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 1 5 10 15
 Ser Gly Ser Ser Lys Ser Thr Leu Lys His Ile Trp Thr Glu Ser Ser
 20 25 30
 Lys Asp Leu Ser Ile Ser Arg Leu Leu Ser Gln Thr Phe Arg Gly Lys
 35 40 45
 Glu Asn Asp Thr Asp Leu Asp Leu Arg Tyr Asp Thr Pro Glu Pro Tyr
 50 55 60
 Ser Glu Gln Asp Leu Trp Asp Trp Leu Arg Asn Ser Thr Asp Leu Gln
 65 70 75 80
 Glu Pro Arg Pro Arg Ala Lys Arg Arg Pro Ile Val Lys Thr Gly Lys
 85 90 95
 Phe Lys Lys Met Phe Gly Trp Gly Asp Phe His Ser Asn Ile Lys Thr
 100 105 110
 Val Lys Leu Asn Leu Leu Ile Thr Gly Lys Ile Val Asp His Gly Asn
 115 120 125
 Gly Thr Phe Ser Val Tyr Phe Arg His Asn Ser Thr Gly Gln Gly Asn
 130 135 140
 Val Ser Val Ser Leu Val Pro Pro Thr Lys Ile Val Glu Phe Asp Leu
 145 150 155 160
 Ala Gln Gln Thr Val Ile Asp Ala Lys Asp Ser Lys Ser Phe Asn Cys
 165 170 175
 Arg Ile Glu Tyr Glu Lys Val Asp Lys Ala Thr Lys Asn Thr Leu Cys
 180 185 190
 Asn Tyr Asp Pro Ser Lys Thr Cys Tyr Gln Glu Gln Thr Gln Ser His
 195 200 205
 Val Ser Trp Leu Cys Ser Lys Pro Phe Lys Val Ile Cys Ile Tyr Ile
 210 215 220
 Ser Phe Tyr Ser Thr Asp Tyr Lys Leu Val Gln Lys Val Cys Pro Asp
 225 230 235 240
 Tyr Asn Tyr His Ser Asp Thr Pro Tyr Phe Pro Ser Gly

245

250

<210> 5661
 <211> 578
 <212> DNA
 <213> Homo sapiens

<400> 5661
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 60
 actggatgcc ttggagcatg caagtccaga gcaccctggg agccctgggtg catgggaccc
 120
 ataaccagtg gcacggcaag gaccagcag gaagcaccag ccactggccc cgacctcccg
 180
 caccaggac ctgacgggca cttagacaca cacagtggcc tgagctcaa ctccagcatg
 240
 accacgctgg agcttcagca gtactggcag aaccagaaat gccgctggaa gcacgtcaaa
 300
 ctgctctttg agatcgcttc agctcgcatc gaggagagaa aagtctctaa gtttgtgatg
 360
 gggaaatcaa ggctggaga gatgacttat ccagggtcac gtggcgagac agggacagca
 420
 ccagaaccag acccgagatg tccacgtcaa agtgacatgc tctgagaggc agcacacaca
 480
 gaataaccct gcatccaaat tccaggaagc tcttaggggt catccagctg ggctagggg
 540
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 578

<210> 5662
 <211> 148
 <212> PRT
 <213> Homo sapiens

<400> 5662
 Met Thr Leu Leu Pro Asp Pro Trp Thr His Thr Ala Leu Gly Thr Gly
 1 5 10 15
 Cys Leu Gly Ala Cys Lys Ser Arg Ala Pro Trp Glu Pro Trp Cys Met
 20 25 30
 Gly Pro Ile Thr Gln Cys Thr Ala Arg Thr Gln Gln Glu Ala Pro Ala
 35 40 45
 Thr Gly Pro Asp Leu Pro His Pro Gly Pro Asp Gly His Leu Asp Thr
 50 55 60
 His Ser Gly Leu Ser Ser Asn Ser Ser Met Thr Thr Arg Glu Leu Gln
 65 70 75 80
 Gln Tyr Trp Gln Asn Gln Lys Cys Arg Trp Lys His Val Lys Leu Leu
 85 90 95
 Phe Glu Ile Ala Ser Ala Arg Ile Glu Glu Arg Lys Val Ser Lys Phe
 100 105 110
 Val Met Gly Lys Ser Arg Pro Gly Glu Met Thr Tyr Pro Gly Ser Arg
 115 120 125
 Gly Glu Thr Gly Thr Ala Pro Glu Pro Asp Pro Arg Cys Pro Arg Gln
 130 135 140
 Ser Asp Met Leu

145

<210> 5663

<211> 857

<212> DNA

<213> Homo sapiens

<400> 5663

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120
agacaggagg ctgccgtggt caagaagggc caagccttga agtctcacgg caccctctgt
180
ggtaggaggt taaggctcag gggccaacta ctgggtcttg cagtcccat cgttgctgtg
240
ggctgtcttc accttcttta gtctctcttg tagctcagac tcggccacca caacctcctt
300
tggtctcttg taagagatga tcagggtgca gttggcgtgg gcaaagctca gcaaggcgtc
360
atccagaggt agctggtgtc tatctagatc aggaatggag aacttcttgt agtacttctt
420
gttggttggt ctgacaatga tgcagcgctc cttctggtcc acagagacac tatagacatc
480
cttaggatag gggagggttc gaatccgcca ctggaaactc atcttggtgt ccttgcgcat
540
gaagatagga ttggcattgc ttctcttgat gagttcaggc cccagggttc ctgctcctag
600
gggcgctggg tctcctactt caagctgcca ctggcccatg gctcccaggg cacttttcac
660
acgccacttt ctcacaagta gttcactcgt cttctcgtca tattcttcag ccatttcctt
720
gccgtctggg aataaatagt gaaccttcct tctccgctcc tgcagcagcg cagtctcttg
780
ggctgtccgc agactctcca accagcccgt caccgccatc tttcccctgc taagcagcac
840
gccagccgc tgccatg
857

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<210> 5664

<211> 203

<212> PRT

<213> Homo sapiens

<400> 5664

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Met Ala Val Thr Gly Trp Leu Glu Ser Leu Arg Thr Ala Gln Lys Thr
1           5           10          15
Ala Leu Leu Gln Asp Gly Arg Arg Lys Val His Tyr Leu Phe Pro Asp
20          25          30
Gly Lys Glu Met Ala Glu Glu Tyr Asp Glu Lys Thr Ser Glu Leu Leu
35          40          45
Val Arg Lys Trp Arg Val Lys Ser Ala Leu Gly Ala Met Gly Gln Trp
50          55          60
Gln Leu Glu Val Gly Asp Pro Ala Pro Leu Gly Ala Gly Asn Leu Gly

```

```

65          70          75          80
Pro Glu Leu Ile Lys Glu Ser Asn Ala Asn Pro Ile Phe Met Arg Lys
      85          90          95
Asp Thr Lys Met Ser Phe Gln Trp Arg Ile Arg Asn Leu Pro Tyr Pro
      100         105         110
Lys Asp Val Tyr Ser Val Ser Val Asp Gln Lys Glu Arg Cys Ile Ile
      115         120         125
Val Arg Thr Thr Asn Lys Lys Tyr Tyr Lys Lys Phe Ser Ile Pro Asp
      130         135         140
Leu Asp Arg His Gln Leu Pro Leu Asp Asp Ala Leu Leu Ser Phe Ala
145         150         155         160
His Ala Asn Cys Thr Leu Ile Ile Ser Tyr Gln Lys Pro Lys Glu Val
      165         170         175
Val Val Ala Glu Ser Glu Leu Gln Lys Glu Leu Lys Lys Val Lys Thr
      180         185         190
Ala His Ser Asn Asp Gly Asp Cys Lys Thr Gln
      195         200

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<210> 5665
 <211> 531
 <212> DNA
 <213> Homo sapiens

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<400> 5665
gtcaagtcct gtaggcagca tagggccctg gctcagcttt tctctgcaga ggcctcgctt
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gagtgggtgg ggtttgcccg cccgcagatc tccacgggag ggggaggggt caggcctccc
120
cagcggccct ctgaagtcac ttgcttcacg gaggtgttac tgtctgctgc tggacagagc
180
atgatggggg ctgcaagggc tccctcaaac cctggactcc tccaacagag ggctcctggt
240
tgccaggtc agctctgccc tgcgtcggcc ccagggcgta gggaggggtgt ttaatcctgg
300
ccccggcctt cccgcaggt ggagcgcgtg tcgcacccgc tgctgcagca gcagtatgag
360
ctgtaccggg agcgctgct gcagcgatgc gagcggcgcc cggaggagca ggtgctgtac
420
cacggcacga cggcaccggc agtgcctgac atctgcgccc acggcttcaa ccgcagcttc
480
tgcgggccga acgccacggt ctacgggaag ggcgtgtatt tcgccaggcg c
531

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<210> 5666
 <211> 79
 <212> PRT
 <213> Homo sapiens

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<400> 5666
Ser Trp Pro Gly Pro Ser Pro Gln Val Glu Arg Val Ser His Pro Leu
1      5      10      15
Leu Gln Gln Gln Tyr Glu Leu Tyr Arg Glu Arg Leu Leu Gln Arg Cys
20     25     30
Glu Arg Arg Pro Val Glu Gln Val Leu Tyr His Gly Thr Thr Ala Pro

```

```

      35              40              45
Ala Val Pro Asp Ile Cys Ala His Gly Phe Asn Arg Ser Phe Cys Gly
      50              55              60
Arg Asn Ala Thr Val Tyr Gly Lys Gly Val Tyr Phe Ala Arg Arg
      65              70              75

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<210> 5667
 <211> 858
 <212> DNA
 <213> Homo sapiens

<400> 5667
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 120
 tttgagaagt taagaatgat ttccaaggaa atccgccaaag ttgttcgaat gacttctgct
 180
 aacatggacc cagctatgat gtttcgacag aggtcactga gtcaaggaag cacaattca
 240
 aacatgctgg atgttcaggg aggtgctcac aaaaaagggg cacgccgcag ctctctgctt
 300
 aatgccaaaga agctatatga ggatgcccaa atggcaagga aggtgaagca gtatctttcc
 360
 agtctcgatg tagagacaga tgaggagaag ttccagatga tgtcattaca gntggagcct
 420
 gcatatggta cctgtgagta caagttttca tttatgtgac gctaaagagc acaacaaaat
 480
 aaaaacttat ttctctagaa ttatacctaa gtcccaagaa aattaacttt cactcacaaa
 540
 agattgctgg cataccttaa gcatcatgtg atccaattaa tcacagactg aatcccatcc
 600
 attcctgatg gctacactat ccaaaaaata gagggataag tagatcttta aaaagctttt
 660
 taattctttt aaaaactgga tcattataga ggaggctttc tgtttgagaa catttttata
 720
 tttatcccta aagagtaaac ataagtggaa tttttacctc tttttatttc atggataata
 780
 tttaccaact agaaaatata agaaatttga ttaaaacacc agtgataata ggtagcttac
 840
 aggtgccagt agtaaggt
 858

<210> 5668
 <211> 152
 <212> PRT
 <213> Homo sapiens

<400> 5668
 Xaa Ser Ala Arg Gly Ser Gln Ser Met Gln Pro Pro Ile Ile Pro Leu
 1 5 10 15
 Phe Pro Val Val Lys Lys Asp Met Thr Phe Leu His Glu Gly Asn Asp
 20 25 30
 Ser Lys Val Asp Gly Leu Val Asn Phe Glu Lys Leu Arg Met Ile Ser

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<210> 5669
<211> 1842
<212> DNA
<213> Homo sapiens
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<400> 5669
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aagttctcca aaaagctctc tgccatctcc ctggggccagg ggcagggccc tcgggcagaa
120
gccatgatgc gcagctccat agagaggggc aaatgggtct tcttcagaa ctgccacctg
180
gcaccaagct ggatgccagc cctagaacgc ctcatcgagc acatcaaccc cgacaaggta
240
cacagggact tccgcctctg gctcaccagc ctgccagca acaagttccc agtgtccatc
300
ctgcagaacg gctccaagat gaccattgag ccgccacgcg gtgtcagggc caacctgctg
360
aagtccata gtagccttgg tgaagacttc ctcaactcct gccacaaggt gatggagttc
420
aagtctctgc tgctgtctct gtgcttggtc catgggaacg ccctggagcg ccgtaagttt
480
gggcccctgg gcttcaacat cccctatgag ttcacggatg gagatctgcg catctgcatc
540
agccagctca agatgttcct ggacgaatat gatgacatcc cctacaaggt cctcaagtac
600
acggcagggg agatcaatta cggggggcgt gtcactgatg actggggaccg gcgctgcatc
660
atgaacatct tggaggactt ctacaaccct gacgtgctct cccctgagca cagctacagc
720
gcctcgggca tctaccacca gatcccgctt acctacgacc tccacggcta cctctcctac
780
atcaagagcc tcccactcaa tgatatgcct gagatctttg gcctgcatga caatgccaac
840
atcacctttg cccagaacga gacgttcgcc ctctctgggca ccatcatcca gctgcaaccc
900
aatcatctt ctgcaggcag ccaggggccgg gaggagatag tggaggacgt cacccaaaac
960

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attctgctca aggtgcctga gcctatcaac ttgcaatggg tgatggccaa gtacccagtg
 1020
 ctgtatgagg aatcaatgaa cacagtacta gtacaagagg tcattaggta caatcggctg
 1080
 ctgcaggtga tcacacagac actgcaagac ctactcaagg cactcaaggg gctggtagtg
 1140
 atgtcctctc agctggagct gatggctgcc agcctgtaca acaatactgt gcctgagctc
 1200
 tggagtgcga aggcctaccc atcgctcaag cctctgtcat catgggtcat ggacctgctg
 1260
 caacgcctgg actttctgca ggcttgatc caagatggca tcccagctgt cttctggatc
 1320
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 1380
 tttgtcatct ccattgacac catctccttt gatttcaagg tgatgtttga ggcaccatca
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 1620
 ctgtgccccca tctacaagac actgactcgt gctggaacac tatcaaccac aggacactct
 1680
 accaactatg tcattgctgt ggagatcccc acccatcagc cccagcgaca ctggataaag
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 1842

<210> 5670

<211> 591

<212> PRT

<213> Homo sapiens

<400> 5670

Phe	Val	Leu	Ser	Pro	Gly	Thr	Asp	Pro	Ala	Ala	Asp	Leu	Tyr	Lys	Phe
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Ala	Glu	Glu	Met	Lys	Phe	Ser	Lys	Lys	Leu	Ser	Ala	Ile	Ser	Leu	Gly
			20					25				30			
Gln	Gly	Gln	Gly	Pro	Arg	Ala	Glu	Ala	Met	Met	Arg	Ser	Ser	Ile	Glu
			35					40				45			
Arg	Gly	Lys	Trp	Val	Phe	Phe	Gln	Asn	Cys	His	Leu	Ala	Pro	Ser	Trp
			50				55				60				
Met	Pro	Ala	Leu	Glu	Arg	Leu	Ile	Glu	His	Ile	Asn	Pro	Asp	Lys	Val
							70				75				80
His	Arg	Asp	Phe	Arg	Leu	Trp	Leu	Thr	Ser	Leu	Pro	Ser	Asn	Lys	Phe
							85				90				95
Pro	Val	Ser	Ile	Leu	Gln	Asn	Gly	Ser	Lys	Met	Thr	Ile	Glu	Pro	Pro
							100				105				110
Arg	Gly	Val	Arg	Ala	Asn	Leu	Leu	Lys	Ser	Tyr	Ser	Ser	Leu	Gly	Glu
							115								125
Asp	Phe	Leu	Asn	Ser	Cys	His	Lys	Val	Met	Glu	Phe	Lys	Ser	Leu	Leu

4842

	565	570	575
His Trp Ile Lys Arg Gly Val Ala Leu Ile Cys Ala Leu Asp Tyr			
	580	585	590

<210> 5671

<211> 818

<212> DNA

<213> Homo sapiens

<400> 5671

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nngcgcgccca gggaaagtgg aagttggatt ctgaaagatc gagtgccca caggaatttt
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atggctcgtcg gatattgaag acttgaacta gactgggggt tctccttgca tttcttgcc
120
gttgccctatc tttgtcctct ctcttcgggc ttcgagatga atgtgcagcc ctgttctag
180
tgtgggtatg ggggtttatcc tgccgagaag atcagctgta tagatcagat atggcataaa
240
gcctgttttc actgtgaagt ttgcaagatg atgctgtctg ttaataactt tgtgagtcac
300
cagaaaaagc cgtactgtca cgcccataac cctaagaaca acactttcac cagtgtctat
360
cacactccat taaatctaaa tgtgaggaca tttccagagg ccatcagtgg gatccatgac
420
caagaagatg gtgaacagtg taaatcagtt tttcattggg acatgaaatc caaggataag
480
gaaggtgcac ctaacaggca gccactggca aatgagagag cctattggac tggatatggg
540
gaaggggaatg cttggtgccc aggagctctg ccagaccccg aaattgtaag gatggttgag
600
gctcgaaaagt ctcttggtga ggaatataca gaagactatg agcaaccag gggcaagggg
660
agctttccag ccatgatcac acctgcttat caaagggccca agaaagccaa ccagctggcc
720
agccaagtgg agtataagag agggcatgat gaacgcatct ccaggttctc cacgggtggcg
780
gatactcctg agctgctacg gagcaaggct tggggcac
818

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<210> 5672

<211> 220

<212> PRT

<213> Homo sapiens

<400> 5672

Met	Asn	Val	Gln	Pro	Cys	Ser	Arg	Cys	Gly	Tyr	Gly	Val	Tyr	Pro	Ala
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Glu	Lys	Ile	Ser	Cys	Ile	Asp	Gln	Ile	Trp	His	Lys	Ala	Cys	Phe	His
			20					25					30		
Cys	Glu	Val	Cys	Lys	Met	Met	Leu	Ser	Val	Asn	Asn	Phe	Val	Ser	His
			35				40					45			
Gln	Lys	Lys	Pro	Tyr	Cys	His	Ala	His	Asn	Pro	Lys	Asn	Asn	Thr	Phe
			50			55				60					
Thr	Ser	Val	Tyr	His	Thr	Pro	Leu	Asn	Leu	Asn	Val	Arg	Thr	Phe	Pro
65					70				75					80	

Glu Ala Ile Ser Gly Ile His Asp Gln Glu Asp Gly Glu Gln Cys Lys
 85 90 95
 Ser Val Phe His Trp Asp Met Lys Ser Lys Asp Lys Glu Gly Ala Pro
 100 105 110
 Asn Arg Gln Pro Leu Ala Asn Glu Arg Ala Tyr Trp Thr Gly Tyr Gly
 115 120 125
 Glu Gly Asn Ala Trp Cys Pro Gly Ala Leu Pro Asp Pro Glu Ile Val
 130 135 140
 Arg Met Val Glu Ala Arg Lys Ser Leu Gly Glu Glu Tyr Thr Glu Asp
 145 150 155 160
 Tyr Glu Gln Pro Arg Gly Lys Gly Ser Phe Pro Ala Met Ile Thr Pro
 165 170 175
 Ala Tyr Gln Arg Ala Lys Lys Ala Asn Gln Leu Ala Ser Gln Val Glu
 180 185 190
 Tyr Lys Arg Gly His Asp Glu Arg Ile Ser Arg Phe Ser Thr Val Ala
 195 200 205
 Asp Thr Pro Glu Leu Leu Arg Ser Lys Ala Trp Gly
 210 215 220

<210> 5673

<211> 1279

<212> DNA

<213> Homo sapiens

<400> 5673

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 gcagaaatca atatttttgt ttgaaagatg cagtcattgt aatttcactt ttggctaaaa
 120
 ccgagacgat aaaagaacag ttgggtgttt ataggatgcc ctcaaagtga gctggctaag
 180
 tgagctgggc tctaacttca ctcaaaatt tatagtacag ctaagaaggc cagtctgtcc
 240
 atgaaaggga gccgagacaa gacgagggcg gcctcttcca ggctgtgcc aagtgtcctt
 300
 ggggtcccgc catggtccac acttctgcag catccgcaga acatgtggcc gggctcctgc
 360
 cagcagcagg gacagccaag tgggaggcag gcatgggtgca cacctgggga ggccccctgt
 420
 gcagaagcag cccacagta gcagcccat ccagaggaag accactccgg agggccacag
 480
 gcctctgcag cctggcact gccgcccagc cctccatctc agcgggatgt gcagggtgag
 540
 acaggaatgc agggacgttc tgcccctagg tcagcctctt catccgcctg ttgtgcttcg
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 atggtaagg ttgcctgtc cacagctgct gcaacgccat ccagggtctc gtcttgtctc
 660
 tccagctcac tctcggcctc cgggccagcc ccttcacctt cctcaggatc tgggttagtt
 720
 cctgggtatc tgcctcagaa agggctggca ggcttgtctg cagggtgcagt gctgtgcctt
 780
 cctgggtctc tgcggtggc tcacggtgca gggtacggcc catcagccca gatgctgcat
 840

gccagactga gcagctcttc tctgcggggg aagaggttct tgcgcttctg agcaccaatg
 900
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 960
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 tgctaatttc gtaaggtagg tggaccttga tgcgtccac gtcttctctt tcaaacctgt
 1080
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 1140
 ctggtttaac gtgagactct gttctgtggg aaataacagc aggaattttt atcagtatcc
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 1260
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 1279

<210> 5674

<211> 81

<212> PRT

<213> Homo sapiens

<400> 5674

Leu	His	Ser	Gln	Ile	Tyr	Ser	Thr	Ala	Lys	Lys	Ala	Ser	Leu	Ser	Met
1			5						10				15		
Lys	Gly	Ser	Arg	Asp	Lys	Thr	Arg	Ala	Ala	Ser	Ser	Arg	Pro	Val	Pro
			20					25					30		
Ser	Val	Leu	Gly	Val	Pro	Pro	Trp	Ser	Thr	Leu	Leu	Gln	His	Pro	Gln
			35				40					45			
Asn	Met	Trp	Pro	Gly	Pro	Ala	Gln	Gln	Gln	Gly	Gln	Pro	Ser	Gly	Arg
	50					55					60				
Gln	Ala	Trp	Cys	Thr	Pro	Gly	Glu	Ala	Pro	Gly	Ala	Glu	Ala	Ala	Pro
65					70					75					80
Gln															

<210> 5675

<211> 1074

<212> DNA

<213> Homo sapiens

<400> 5675

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 ccctgagctc ccaccgagg cttaggccca aggggcctct tccaggctga gggcctgctg
 120
 gggctggggc aggggctgag gctgaaagca gcagcctgcc tagtgggtga cgccaggggc
 180
 cggtgtaaca tggcaccgag gttggggcca cagcaatgtg tgggacggtg ggggtgggctg
 240
 gggcccttgg ctccaagcat tagttctcca agctctggtc cgttctccta cctccttcaa
 300
 ggggcaccag ggctacaagg tggtagttga gtattggggc ccgactcctg gggcactgga
 360

gtggtctcta ggcccagggc cccaaggaga gggctgggtt tctgggagag tgctgggcct
 420
 tcctctctgg gcttggccat cttgacagct tcatcgtagg aggggtggagg ctccgggggtg
 480
 tacaggctgt aggcaggagg agccgtggag tccaggtcca gctccccaaa gggcaggggc
 540
 aaccgcatgc ccagtgggta ctgcacggag ctgtaggagg tcacagtgt gtgtacaggg
 600
 ctgtcactgt ccatagggat gactgccacg tcgcagggct gccgtgctgg tggcagatgt
 660
 ggctgggcct gtgcctgctt ccggaggcag cagaaccgga cacaaccagc tgtgacacca
 720
 cacagcagaa gcaggaggac cgccagcagg atgagcctag gagagcaagg ctctaccact
 780
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 840
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 900
 agagcctggc ctccggctgc tgggcctgcc ctggctatct ctctgggct ggccaggggt
 960
 ggccttgggc tcaactcccag gactcgtgt cctcagcgag tgccccactg ctgagcggga
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 tcgtagggga ctcccgcgga ggccaggcgg gagagtggg agggaaggtc ctgg
 1074

<210> 5676

<211> 145

<212> PRT

<213> Homo sapiens

<400> 5676

Glu	Val	Thr	Val	Leu	Cys	Thr	Gly	Leu	Ser	Leu	Ser	Ile	Gly	Met	Thr
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Ala	Thr	Ser	Gln	Gly	Cys	Arg	Ala	Gly	Gly	Arg	Cys	Gly	Trp	Ala	Cys
			20				25					30			
Ala	Cys	Phe	Arg	Arg	Gln	Gln	Asn	Arg	Thr	Gln	Pro	Ala	Val	Thr	Pro
		35					40					45			
His	Ser	Arg	Ser	Arg	Arg	Thr	Ala	Ser	Arg	Met	Ser	Leu	Gly	Glu	Gln
	50					55				60					
Gly	Ser	Thr	Thr	Gly	Leu	Thr	Leu	Gly	His	Arg	Ala	Pro	Ala	Pro	Trp
65					70				75					80	
Gly	Met	Ser	Trp	His	Asn	His	Arg	Arg	Gln	Val	Asn	Arg	Ile	Lys	Ser
			85					90					95		
Arg	Gln	Cys	Leu	Ser	Met	Ser	Glu	Thr	Ala	Val	Ala	Arg	Ala	Trp	Pro
			100					105					110		
Arg	Ala	Ala	Gly	Pro	Ala	Leu	Ala	Ile	Ser	Pro	Gly	Leu	Ala	Arg	Gly
			115				120					125			
Gly	Leu	Gly	Leu	Thr	Pro	Arg	Thr	Arg	Cys	Pro	Gln	Arg	Val	Pro	His
	130						135					140			

Cys
 145

<210> 5677

<211> 477

<212> DNA

<213> Homo sapiens

<400> 5677

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 aaaaggacac tggatgaagta gcggtagcac tcctccacgt tgcccaaggg gggtgctggg
 120
 agggaaagca agatgcagca gtgaggccct ctctggatc cattcattca cttcactcaa
 180
 cagctgttta tgaccatgag caatacaagc cttgtgaaga tcctggagca gggcacaagc
 240
 cgctgacgtc tgctccagtg agaagccctg ctgccttccc caattcgctt tctttccgca
 300
 gccgccgctg ccccgacccc ggatctgcat gtggaagtac ctggacgtcc attccatgca
 360
 ccagctggag aagaccacca atgctgagat gaggagggtg ctggctgagc tgctggagct
 420
 aggggtgctc gagcagagcc tgagcgacgc catcaccctg gacctcttct gccgcgg
 477

<210> 5678

<211> 151

<212> PRT

<213> Homo sapiens

<400> 5678

Met	Ala	Ser	Leu	Arg	Leu	Cys	Ser	Gly	His	Pro	Ser	Ser	Ser	Ser	Ser
1			5					10					15		
Ala	Ser	Thr	Ser	Leu	Ile	Ser	Ala	Leu	Val	Val	Phe	Ser	Ser	Trp	Cys
		20					25				30				
Met	Glu	Trp	Thr	Ser	Arg	Tyr	Phe	His	Met	Gln	Ile	Arg	Gly	Arg	Gly
	35					40				45					
Ser	Gly	Gly	Cys	Gly	Lys	Lys	Ala	Asn	Trp	Gly	Arg	Gln	Gln	Gly	Phe
	50				55					60					
Ser	Leu	Glu	Gln	Thr	Ser	Ala	Ala	Cys	Ala	Leu	Leu	Gln	Asp	Leu	His
65			70					75				80			
Lys	Ala	Cys	Ile	Ala	His	Gly	His	Lys	Gln	Leu	Leu	Ser	Glu	Val	Asn
		85						90				95			
Glu	Trp	Ile	Pro	Glu	Arg	Ala	Ser	Leu	Leu	His	Leu	Ala	Phe	Pro	Thr
	100						105					110			
Ser	Asn	Pro	Leu	Gly	Gln	Arg	Gly	Gly	Val	Leu	Pro	Leu	Leu	His	Gln
	115					120						125			
Cys	Pro	Phe	Leu	Pro	Trp	Ser	Gln	Ala	Ala	Ser	Phe	Gln	His	Arg	Pro
	130				135						140				
Leu	Gln	Arg	Gly	Thr	Ala	Ala									
145					150										

<210> 5679

<211> 665

<212> DNA

<213> Homo sapiens

<400> 5679

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 120
 tccacctccc agcatgctgg ctccaattcc acctctcagc agcctagccc tgaatccaca
 180
 ccacagcagc ctagtcctga atccacacca cagcagccta gccctgaatc cacaccacag
 240
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 300
 atccgcccgt cctcttgctg ccttttatct ccagatgcta acgtgaaggc agccctcaa
 360
 tccaggaaag cagaaaatct tcaagaaaac cctccagtca tcgtaacgcg tgcctccaa
 420
 gccctcgaa ctgtggctgt ggctctgggg gctctaggag ctgcctacta catcactgaa
 480
 tccttgtaga caagccccta ggcccacagt ctggcagacc tccaccagcc ccaggagttg
 540
 ataggtgatg gcgctgggag aagatgttca gaatatctca aaagccaagt ccagaagatc
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 660
 aaaaa
 665

<210> 5680

<211> 143

<212> PRT

<213> Homo sapiens

<400> 5680

Val	Gly	Arg	Ile	Tyr	His	Glu	Glu	Gly	Gln	Glu	Glu	Lys	Val	Arg	Gly
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Gln	Thr	Pro	Pro	Asp	Ser	Thr	Ser	Gln	His	Ala	Gly	Ser	Asn	Ser	Thr
			20					25					30		
Ser	Gln	Gln	Pro	Ser	Pro	Glu	Ser	Thr	Pro	Gln	Gln	Pro	Ser	Pro	Glu
		35					40					45			
Ser	Thr	Pro	Gln	Gln	Pro	Ser	Pro	Glu	Ser	Thr	Pro	Gln	His	Ser	Ser
	50					55					60				
Leu	Glu	Thr	Thr	Ser	Arg	Gln	Pro	Ala	Phe	Gln	Ala	Leu	Pro	Ala	Pro
65					70					75					80
Glu	Ile	Arg	Arg	Ser	Ser	Cys	Cys	Leu	Leu	Ser	Pro	Asp	Ala	Asn	Val
			85					90						95	
Lys	Ala	Ala	Pro	Gln	Ser	Arg	Lys	Ala	Glu	Asn	Leu	Gln	Glu	Asn	Pro
			100					105					110		
Pro	Val	Ile	Val	Thr	Arg	Val	Leu	Gln	Ala	Leu	Gly	Thr	Val	Ala	Val
		115					120					125			
Ala	Leu	Gly	Ala	Leu	Gly	Ala	Ala	Tyr	Tyr	Ile	Thr	Glu	Ser	Leu	
	130						135					140			

<210> 5681

<211> 1402

<212> DNA

<213> Homo sapiens

<400> 5681

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gtcggggacct ggtttccggg catgagctga gagcaccacg ccgaggccac gagtatttca
120
tagacattga tggaagcaga aacccaaaact cttcccctgg agaatgcatc catcctttca
180
gagggctctc tgcaggaagg acaccgatta tggattggca acctggaccc caaaattacc
240
gaataccacc tcctcaagct cctccagaag tttggcaagg taaagcagtt tgacttcctc
300
ttccacaagt caggtgcttt ggagggacag cctcgaggct actgttttgt taactttgaa
360
actaagcagg aagcagagca agccatccag tgtctcaatg gcaagttggc cctgtccaag
420
aagctggttg tgcgatgggc acatgctcaa gtaaagagat atgatcataa caagaatgat
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600
gatgcagagt atccagcagc gcctgtttat tcctacttta agccaccaga taaaaaagg
660
actactccat attctagaac agcatggaaa tctcgaagat gatggttgtg aattactgta
720
gcagcaaaag caaattggtc tccacacctc aaatcgctctg cctgtgtact ttgtagatgt
780
gaatgggtact attcaacgga gcacaatcac atgttagcat ttggtaacat aatgtttttg
840
gatgttctta tggatgtttc ttccctaaac tatgtatgga attgagcatc atccagaata
900
aatagcgttg tatcccaaat tgtgatttga accctgggat gctctaattg gctgggttgg
960
ttggatttgt aactccagaa acattctata gtgtgccaga gcaaaaggca aatacacaaa
1020
atattattta aatcaggaaa ctaaaaatat taacatctat taaaaaattg agcatttttc
1080
tacgctcgtg tgtcttttac aacataaaga aaaagtaaaa ggcagggagg gaagtgagag
1140
acagatttta aatcatgttc agaactgttg ttccagaatt tactacggca atccctccaa
1200
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1260
agtaatctgt ttaagaatta tgcttattgt ttcaaaatcc caactaggaa aacatggtgt
1320
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1380
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1402

<210> 5682

<211> 190

<212> PRT

<213> Homo sapiens

<400> 5682

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Met Glu Ala Glu Thr Lys Thr Leu Pro Leu Glu Asn Ala Ser Ile Leu
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Ser Glu Gly Ser Leu Gln Glu Gly His Arg Leu Trp Ile Gly Asn Leu
 20           25           30
Asp Pro Lys Ile Thr Glu Tyr His Leu Leu Lys Leu Leu Gln Lys Phe
 35           40           45
Gly Lys Val Lys Gln Phe Asp Phe Leu Phe His Lys Ser Gly Ala Leu
 50           55           60
Glu Gly Gln Pro Arg Gly Tyr Cys Phe Val Asn Phe Glu Thr Lys Gln
 65           70           75           80
Glu Ala Glu Gln Ala Ile Gln Cys Leu Asn Gly Lys Leu Ala Leu Ser
 85           90           95
Lys Lys Leu Val Val Arg Trp Ala His Ala Gln Val Lys Arg Tyr Asp
100          105          110
His Asn Lys Asn Asp Lys Ile Leu Pro Ile Ser Leu Glu Pro Ser Ser
115          120          125
Ser Thr Glu Pro Thr Gln Ser Asn Leu Ser Val Thr Ala Lys Ile Lys
130          135          140
Ala Ile Glu Ala Lys Leu Lys Met Met Ala Glu Asn Pro Asp Ala Glu
145          150          155          160
Tyr Pro Ala Ala Pro Val Tyr Ser Tyr Phe Lys Pro Pro Asp Lys Lys
165          170          175
Arg Thr Thr Pro Tyr Ser Arg Thr Ala Trp Lys Ser Arg Arg
180          185          190

```

<210> 5683

<211> 328

<212> DNA

<213> Homo sapiens

<400> 5683

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cgcagggtctg acctgtactg gtgagtaagc attagccatg ggacgcacac aatccagcca
120
atgcttttcag aaggcaccac atgtgatgca cagcctctat ttacatgtga ataattacac
180
tgctgctttc tgggttaaag tagggaaata cagtgttcca gggcatagga atggtgctct
240
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300
acaaatttca ttctggatgc tgatgctg
328

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<210> 5684

<211> 103

<212> PRT

<213> Homo sapiens

<400> 5684

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Met Lys Phe Val Tyr Phe Lys Ala Leu Leu Thr Lys Pro Ala Ser His

```

```

      1           5           10           15
Gln Gln Asn Lys Leu Phe Tyr Pro Glu His His Ser Tyr Ala Leu Glu
      20           25           30
His Cys Ile Ser Leu Leu Leu Thr Arg Lys Gln Gln Cys Asn Tyr Ser
      35           40           45
His Val Asn Arg Gly Cys Ala Ser His Val Val Pro Ser Glu Ser Ile
      50           55           60
Gly Trp Ile Val Cys Val Pro Trp Leu Met Leu Thr His Gln Tyr Arg
      65           70           75           80
Ser Ala Leu Arg Val Cys Arg Asp Gly Gln Cys Leu Thr Ala Glu Ala
      85           90           95
Ser Leu Gly Gln Arg Met Asp
      100

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<210> 5685
 <211> 604
 <212> DNA
 <213> Homo sapiens

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<400> 5685
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ctggcctacg agtctgacgg gatcgtggtt tccaacgaca cataccgtga cctccaaggc
120
gagcggcagg agtgaagcgt cttcatcgag gagcggctgc tcatgtactc cttcgtcaat
180
gacaagtatg ttccctccca gaggcctga cagacttggg gtccacaggg gaagccagag
240
gtgcccttgg caaggggtgga gctgggggct gggctctgcg gggccctgtg gccatgggag
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gttgcggtgc ttggctccag gcagctttga gtagtgagac gatagctcac cacataggag
360
aaatcagacc gggaccaggg aggctgtggg gtggagagag tggctaattt gggagataga
420
gccgtagcac ttatgagggg atgtatgtgg ttgatggttc cagggtggcct ctctacgaac
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cgacttcagg gagggagttc ccctaaaggt gcccatgggc tgtggccctc tagaccgggg
600
atcc
604

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<210> 5686
 <211> 69
 <212> PRT
 <213> Homo sapiens

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<400> 5686
Pro Cys Ser Arg Val Gly Gly Lys Arg Val Val Cys Tyr Asp Asp Arg
1           5           10           15
Phe Ile Val Lys Leu Ala Tyr Glu Ser Asp Gly Ile Val Val Ser Asn
20           25           30
Asp Thr Tyr Arg Asp Leu Gln Gly Glu Arg Gln Glu Trp Lys Arg Phe

```

```

      35              40              45
Ile Glu Glu Arg Leu Leu Met Tyr Ser Phe Val Asn Asp Lys Tyr Val
      50              55              60
Pro Ser Gln Arg Pro
      65

```

```
<210> 5687
<211> 328
<212> DNA
<213> Homo sapiens
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<400> 5687
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ccccggctct gcatgcacgc ctgctgaac accccgggct cttcccgttg cactgcccc
120
ggtggatccg aaactctggc tgacgggaag agctgtgaga atgtggatga atgtgtgggc
180
ctgcagccgg tgtgccccca ggggaccaca tgcaccaaca ccggtggaag cttccagtgt
240
gtcagccctg agtgccccga gggcagcggc aatgtgagct acgtgaagac gtctccattc
300
cagtgtgagc ggaaccctg ccccatgg
328
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```
<210> 5688
<211> 109
<212> PRT
<213> Homo sapiens
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<400> 5688
Thr Leu Ser Arg Pro Arg Gly Ala Gly Lys Gly Gly Gly Asp Gly Gly
 1             5             10             15
Gly Gly Glu Arg Pro Arg Leu Cys Met His Ala Cys Val Asn Thr Pro
      20             25             30
Gly Ser Ser Arg Cys Thr Cys Pro Gly Gly Ser Glu Thr Leu Ala Asp
      35             40             45
Gly Lys Ser Cys Glu Asn Val Asp Glu Cys Val Gly Leu Gln Pro Val
      50             55             60
Cys Pro Gln Gly Thr Thr Cys Ile Asn Thr Gly Gly Ser Phe Gln Cys
65             70             75             80
Val Ser Pro Glu Cys Pro Glu Gly Ser Gly Asn Val Ser Tyr Val Lys
      85             90             95
Thr Ser Pro Phe Gln Cys Glu Arg Asn Pro Cys Pro Met
      100            105

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<210> 5689
<211> 1897
<212> DNA
<213> Homo sapiens
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<400> 5689
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60

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120
tgtgtgggtg tcttcagcca ggctcctagt gggagagccc cactcagccc cagtttgaac
180
tctcgcccat cacctatcag tgccactncc tccagctctc gttcctgaaa cccgagagta
240
ccgctctcag tctccagtaa gaagcatgga tgaagctcct tgtgttaacg gccgctgggg
300
aacactgaga cccagggctc aaaggcagac tcctcagggt cccgggaagg gagcctttcc
360
ccagccagag gagacggctc tcctatcctc aatgggtggga gtttgtctcc aggaacggca
420
gctgtgggtg gctcttcttt ggacagtcct gtacaggcca tatctccaag tactccatct
480
gctgctgaag gatacgacct gaaaatagga ctttctttgg ccccccgcg aggatcaacc
540
agatcagaaa gatctgagat taggatccat agatctgaat tgggatctaa acccgcttcc
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cctgaacaga caaatgggtg gcatacccca cctcacgtgg ccagtgcctt tgcagggggc
720
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780
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840
cagagtttga gcagtggaga aacagtgcct atccctcgcc cagggcctgc ccaaggagat
900
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960
gttggaacac ccctatacca gagtatgaac tgcaagccca tgcagatgta cgtgctggac
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1260
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1440
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1500
gctgggctgc ctttttctac cttgctggta actagaccaa gaagttagag aatagactaa
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<210> 5690

<211> 54

<212> PRT

<213> Homo sapiens

<400> 5690

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		20						25				30			
Pro	Leu	Ser	Pro	Ser	Leu	Asn	Ser	Arg	Pro	Ser	Pro	Ile	Ser	Ala	Thr
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<210> 5691

<211> 1227

<212> DNA

<213> Homo sapiens

<400> 5691

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<210> 5692

<211> 86

<212> PRT

<213> Homo sapiens

<400> 5692

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			20					25					30		
Pro	Ile	Asn	Thr	Phe	His	Gly	Ile	His	Gln	Asn	Glu	Asp	Glu	Pro	Ile
			35				40					45			
Arg	Val	Ser	Tyr	His	Arg	Asn	Ile	His	Tyr	Asn	Ser	Val	Val	Asn	Pro
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<210> 5693

<211> 389

<212> DNA

<213> Homo sapiens

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 <212> PRT
 <213> Homo sapiens

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 <213> Homo sapiens

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<211> 368

<212> PRT

<213> Homo sapiens

<400> 5696

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Gln	Pro	Pro	Leu	Glu	Ala	Glu	Glu	Pro	Pro	Asp	Arg	Gly	Thr	Asp	Gly
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Val	Ala	Leu	Leu	Ala	Gly	Pro	Trp	Asp	Gln	Ser	Leu	Ala	Phe	Pro	Leu
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		165						170					175		
Val	Arg	Ala	Phe	Tyr	Asp	Thr	Leu	Asp	Ala	Ala	Arg	Ser	Ser	Ile	Arg
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Val	Val	Arg	Val	Glu	Arg	Val	Ser	His	Pro	Leu	Leu	Gln	Gln	Gln	Tyr
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Glu	Leu	Tyr	Arg	Glu	Arg	Leu	Leu	Gln	Arg	Cys	Glu	Arg	Arg	Pro	Val

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	245	250
Tyr Gly Lys Gly Val Tyr Phe Ala Arg Arg Ala Ser Leu Ser Val Gln		255
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Asp Arg Tyr Ser Pro Pro Asn Ala Asp Gly His Lys Ala Val Phe Val		270
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Ala Arg Val Leu Thr Gly Asp Tyr Gly Gln Gly Arg Arg Gly Leu Arg		285
	290	295
Ala Pro Pro Leu Arg Gly Pro Gly His Val Leu Leu Arg Tyr Asp Ser		300
305	310	315
Ala Val Asp Cys Ile Cys Gln Pro Ser Ile Phe Val Ile Phe His Asp		320
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Thr Gln Ala Leu Pro Thr His Leu Ile Thr Cys Glu His Val Pro Arg		335
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<211> 3362

<212> DNA

<213> Homo sapiens

<400> 5697

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<211> 403

<212> PRT

<213> Homo sapiens

<400> 5698

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			20					25					30		
Thr	Ser	Arg	Gly	Cys	Gly	Leu	Asp	Leu	Leu	Pro	Gln	Tyr	Val	Ser	Leu
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<210> 5699

<211> 1565

<212> DNA

<213> Homo sapiens

<400> 5699

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<210> 5700

<211> 197

<212> PRT

<213> Homo sapiens

<400> 5700

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<210> 5702

<211> 348

<212> PRT

<213> Homo sapiens

<400> 5702

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Lys Ser Ser Ile Lys Arg Val Leu Ala Ile Thr Thr Val Leu Ser Leu
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<210> 5703

<211> 1496

<212> DNA

<213> Homo sapiens

<400> 5703

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<212> PRT

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<210> 5708

<211> 506

<212> PRT

<213> Homo sapiens

<400> 5708

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			20					25					30		
Glu	Val	Thr	Glu	Glu	Asn	Val	Gln	Val	Leu	Leu	Pro	Ala	Ala	Ser	Leu
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Leu	Gln	Leu	Met	Asp	Val	Arg	Gln	Asn	Cys	Cys	Asp	Phe	Leu	Gln	Ser
			50				55				60				
Gln	Leu	His	Pro	Thr	Asn	Cys	Leu	Gly	Ile	Arg	Ala	Phe	Ala	Asp	Val
65					70				75					80	
His	Thr	Cys	Thr	Asp	Leu	Leu	Gln	Gln	Ala	Asn	Ala	Tyr	Ala	Glu	Gln
				85					90					95	
His	Phe	Pro	Glu	Val	Met	Leu	Gly	Glu	Glu	Phe	Leu	Ser	Leu	Ser	Leu
			100				105					110			
Asp	Gln	Val	Cys	Ser	Leu	Ile	Ser	Ser	Asp	Lys	Leu	Thr	Val	Ser	Ser
			115				120					125			
Glu	Glu	Lys	Val	Phe	Glu	Ala	Val	Ile	Ser	Trp	Ile	Asn	Tyr	Glu	Lys
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Glu	Thr	Arg	Leu	Glu	His	Met	Ala	Lys	Leu	Met	Glu	His	Val	Arg	Leu
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Pro	Leu	Leu	Pro	Arg	Asp	Tyr	Leu	Val	Gln	Thr	Val	Glu	Glu	Glu	Ala
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Leu	Ile	Lys	Asn	Asn	Asn	Thr	Cys	Lys	Asp	Phe	Leu	Ile	Glu	Ala	Met
			180				185					190			
Lys	Tyr	His	Leu	Leu	Pro	Leu	Asp	Gln	Arg	Leu	Leu	Ile	Lys	Asn	Pro
			195				200					205			
Arg	Thr	Lys	Pro	Arg	Thr	Pro	Val	Ser	Leu	Pro	Lys	Val	Met	Ile	Val
			210			215					220				
Val	Gly	Gly	Gln	Ala	Pro	Lys	Ala	Ile	Arg	Ser	Val	Glu	Cys	Tyr	Asp
225				230					235					240	
Phe	Glu	Glu	Asp	Arg	Trp	Asp	Gln	Ile	Ala	Glu	Leu	Pro	Ser	Arg	Arg
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Cys	Arg	Ala	Gly	Val	Val	Phe	Met	Ala	Gly	His	Val	Tyr	Ala	Val	Gly
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Gly	Phe	Asn	Gly	Ser	Leu	Arg	Val	Arg	Thr	Val	Asp	Val	Tyr	Asp	Gly
			275				280					285			
Val	Lys	Asp	Gln	Trp	Thr	Ser	Ile	Ala	Ser	Met	Gln	Glu	Arg	Arg	Ser
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<210> 5709
<211> 1805
<212> DNA
<213> Homo sapiens
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660
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 840
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 1080
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<210> 5710

<211> 441

<212> PRT

<213> Homo sapiens

<400> 5710

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		20					25					30			
Lys	Lys	Leu	Trp	Val	Met	Asn	Ser	Gln	Val	Ser	Leu	Ile	Glu	Arg	Asn
		35				40					45				
Ala	Phe	Asp	Gly	Leu	Ala	Ser	Leu	Val	Glu	Leu	Asn	Leu	Ala	His	Asn

50	55	60
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Val Glu Leu His Leu His His Asn Pro Trp Asn Cys Asp Cys Asp Ile		80
	85	90
Leu Trp Leu Ala Trp Trp Leu Arg Glu Tyr Ile Pro Thr Asn Ser Thr		95
	100	105
Cys Cys Gly Arg Cys His Ala Pro Met His Met Arg Gly Arg Tyr Leu		110
	115	120
Val Glu Val Asp Gln Ala Ser Phe Gln Cys Ser Ala Pro Phe Ile Met		125
	130	135
Asp Ala Pro Arg Asp Leu Asn Ile Ser Glu Gly Arg Met Ala Glu Leu		140
145	150	155
Lys Cys Arg Thr Pro Pro Met Ser Ser Val Lys Trp Leu Leu Pro Asn		160
	165	170
Gly Thr Val Leu Ser His Ala Ser Arg His Pro Arg Ile Ser Val Leu		175
	180	185
Asn Asp Gly Thr Leu Asn Phe Ser His Val Leu Leu Ser Asp Thr Gly		190
	195	200
Val Tyr Thr Cys Met Val Thr Asn Val Ala Gly Asn Ser Asn Ala Ser		205
	210	215
Ala Tyr Leu Asn Val Ser Thr Ala Glu Leu Asn Thr Ser Asn Tyr Ser		220
225	230	235
Phe Phe Thr Thr Val Thr Val Glu Thr Thr Glu Ile Ser Pro Glu Asp		240
	245	250
Thr Thr Arg Lys Tyr Lys Pro Val Pro Thr Thr Ser Thr Gly Tyr Gln		255
	260	265
Pro Ala Tyr Thr Thr Ser Thr Thr Val Leu Ile Gln Thr Thr Arg Val		270
	275	280
Pro Lys Gln Val Ala Val Pro Ala Thr Asp Thr Thr Asp Lys Met Gln		285
	290	295
Thr Ser Leu Asp Glu Val Met Lys Thr Thr Lys Ile Ile Ile Gly Cys		300
305	310	315
Phe Val Ala Val Thr Leu Leu Ala Ala Ala Met Leu Ile Val Phe Tyr		320
	325	330
Lys Leu Arg Lys Arg His Gln Gln Arg Ser Thr Val Thr Ala Ala Arg		335
	340	345
Thr Val Glu Ile Ile Gln Val Asp Glu Asp Ile Pro Ala Ala Thr Ser		350
	355	360
Ala Ala Ala Thr Ala Ala Pro Ser Gly Val Ser Gly Glu Gly Ala Val		365
	370	375
Val Leu Pro Thr Ile His Asp His Ile Asn Tyr Asn Thr Tyr Lys Pro		380
385	390	395
Ala His Gly Ala His Trp Thr Glu Asn Ser Leu Gly Asn Ser Leu His		400
	405	410
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<210> 5711

<211> 1142

<212> DNA

<213> Homo sapiens

<400> 5711

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<210> 5712

<211> 145

<212> PRT

<213> Homo sapiens

<400> 5712

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Arg	Ile	Leu	Phe	His	Gly	Val	Phe	Tyr	Ala	Gly	Gly	Phe	Ala	Ile	Val
		20					25					30			
Tyr	Tyr	Leu	Ile	Gln	Lys	Phe	His	Ser	Arg	Ala	Leu	Tyr	Tyr	Lys	Leu
		35					40					45			

Ala Val Glu Gln Leu Gln Ser His Pro Glu Ala Gln Glu Ala Leu Gly
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 Pro Pro Leu Asn Ile His Tyr Leu Lys Leu Ile Asp Arg Glu Asn Phe
 65 70 75 80
 Val Asp Ile Val Asp Ala Lys Leu Lys Ile Pro Val Ser Gly Ser Lys
 85 90 95
 Ser Glu Gly Leu Leu Tyr Val His Ser Ser Arg Gly Gly Pro Phe Gln
 100 105 110
 Arg Trp His Leu Asp Glu Val Phe Leu Glu Leu Lys Asp Gly Gln Gln
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<210> 5713

<211> 1996

<212> DNA

<213> Homo sapiens

<400> 5713

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<210> 5714

<211> 408

<212> PRT

<213> Homo sapiens

<400> 5714

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Glu	Met	Asp	Leu	Gln	Val	Gln	Asn	Ala	Met	Asp	Gln	Leu	Glu	Gln	Arg
			20					25					30		
Val	Ser	Glu	Phe	Phe	Met	Asn	Ala	Lys	Lys	Asn	Lys	Pro	Glu	Trp	Arg
			35				40					45			
Glu	Glu	Gln	Met	Ala	Ser	Ile	Lys	Lys	Asp	Tyr	Tyr	Lys	Ala	Leu	Glu
			50				55				60				
Asp	Ala	Asp	Glu	Lys	Val	Gln	Leu	Ala	Asn	Gln	Ile	Tyr	Asp	Leu	Val
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<211> 1458
<212> DNA
<213> Homo sapiens
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180
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<210> 5716

<211> 148

<212> PRT

<213> Homo sapiens

<400> 5716

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5

10

15

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 Glu Cys Leu His Thr Phe Cys Lys Ser Cys Ile Val Lys Tyr Leu Gln
 35 40 45
 Thr Ser Lys Tyr Cys Pro Met Cys Asn Ile Lys Ile His Glu Thr Gln
 50 55 60
 Pro Leu Leu Asn Leu Lys Leu Asp Arg Val Met Gln Asp Ile Val Tyr
 65 70 75 80
 Lys Leu Val Pro Gly Leu Gln Asp Ser Glu Glu Lys Arg Ile Arg Glu
 85 90 95
 Phe Tyr Gln Ser Arg Gly Leu Asp Arg Val Thr Gln Pro Thr Gly Glu
 100 105 110
 Glu Pro Ala Leu Ser Asn Leu Gly Leu Pro Phe Ser Ser Phe Asp His
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 130 135 140
 Glu Arg Leu Arg
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<210> 5717

<211> 1419

<212> DNA

<213> Homo sapiens

<400> 5717

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 420
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 480
 cgagtgtcca ctgtgcacgg gaacgtcatc accaccaaca ccatcttcga gaacctctgg
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 720
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 780
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 840
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 900

ctgatctcca tcttgggtgg cctctgectc tgctccgcct gctgctgcgg ctctgacgag
 960
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 1020
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 1080
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 1140
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 1320
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 1380
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 1419

<210> 5718

<211> 228

<212> PRT

<213> Homo sapiens

<400> 5718

Met	Ser	Met	Ala	Val	Glu	Thr	Phe	Gly	Phe	Phe	Met	Ala	Thr	Val	Gly
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Leu	Leu	Met	Leu	Gly	Val	Thr	Leu	Pro	Asn	Ser	Tyr	Trp	Arg	Val	Ser
			20					25					30		
Thr	Val	His	Gly	Asn	Val	Ile	Thr	Thr	Asn	Thr	Ile	Phe	Glu	Asn	Leu
		35					40					45			
Trp	Phe	Ser	Cys	Ala	Thr	Asp	Ser	Leu	Gly	Val	Tyr	Asn	Cys	Trp	Glu
	50					55				60					
Phe	Pro	Ser	Met	Leu	Ala	Leu	Ser	Gly	Tyr	Ile	Gln	Ala	Cys	Arg	Ala
65				70					75					80	
Leu	Met	Ile	Thr	Ala	Ile	Leu	Leu	Gly	Phe	Leu	Gly	Leu	Leu	Leu	Gly
			85					90					95		
Ile	Ala	Gly	Leu	Arg	Cys	Thr	Asn	Ile	Gly	Gly	Leu	Glu	Leu	Ser	Arg
			100					105					110		
Lys	Ala	Lys	Leu	Ala	Ala	Thr	Ala	Gly	Ala	Leu	His	Ile	Leu	Ala	Gly
		115					120					125			
Ile	Cys	Gly	Met	Val	Ala	Ile	Ser	Trp	Tyr	Ala	Phe	Asn	Ile	Thr	Arg
	130					135				140					
Asp	Phe	Phe	Asp	Pro	Leu	Tyr	Pro	Gly	Thr	Lys	Tyr	Glu	Leu	Gly	Pro
145				150					155					160	
Ala	Leu	Tyr	Leu	Gly	Trp	Ser	Ala	Ser	Leu	Ile	Ser	Ile	Leu	Gly	Gly
			165					170					175		
Leu	Cys	Leu	Cys	Ser	Ala	Cys	Cys	Cys	Gly	Ser	Asp	Glu	Asp	Pro	Ala
		180						185					190		
Ala	Ser	Ala	Arg	Arg	Pro	Tyr	Gln	Ala	Pro	Val	Ser	Val	Met	Pro	Val
		195					200					205			
Ala	Thr	Ser	Asp	Gln	Glu	Gly	Asp	Ser	Ser	Phe	Gly	Lys	Tyr	Gly	Arg
	210					215					220				
Asn	Ala	Tyr	Val												

225

<210> 5719

<211> 2267

<212> DNA

<213> Homo sapiens

<400> 5719

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120
ctccgtgcc aagcagtcgg aaagggaac aggcactaat caaaggcaac tgctcactcg
180
tacctcttcc ttctgaagca catgatgaag tctattctca gcagcgattt tctttacaaa
240
ctctttcggt aatcccccca gaggggaagat ggttctctcc agggcatcct gggaaacctg
300
gcatttctaa cttcaaaccg atttctgaaa agcccttcgg gcttcttaac gtgcttctgc
360
tcaaagactt cttcatcttc caggggaagt cttgcatagt gacctgtggc aatggcatct
420
gcccctgaac acatcattcc aatactcctt tacgtaggac acttgatgga aagggatgtc
480
taagatctgg caaactctgt aagcatcttc acagtctttg tcggcagtac agaccccatg
540
ttcatccagt gagtcccagt tcttcataaa caccctgtc acctggtaac ctctccgcct
600
cagcagcagc gcggccacgg cgctgtccac gccgccggac agggcgcaac cgacgtgccg
660
caaggcctgc atccgccagt cgcctcgtcc ggcggcgtgg acagcgccgt ggccgcgtg
720
ctgctgaggc ggagaggtta ccaggtgaca ggggtgttta tgaagaactg ggactcactg
780
gatgaacatg gggctctgtac tgccgacaaa gactgtgaag atgcttacag agtttgccag
840
atcttagaca tccctttcca tcaagtgtcc tacgtaaagg agtattggaa tgatgtgttc
900
agtgaacttt tgaatgagta tgaaaaagga aggactccca atcctgacat agtttgcaac
960
aagcacatca aatttagttg cttttttcat tatgctgtgg ataactcttg ggcagatgcc
1020
attgccacag gtcactatgc aagaacttcc ctggaagatg aagaagtctt tgagcagaag
1080
cacgttaaga agcccgaagg gcttttcaga aatcggtttg aagttagaaa tgcggtaaaa
1140
ctctccagg cagctgacag ctttaaagac cagaccttct ttctcagcca ggtttcccg
1200
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1260
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1320
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1380

cactttattt ccatagaaga caataagggt ctgggaacac ataaagggtg gttcctgtat
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 1500
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 1740
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 1860
 gccactgaga gccccagtga cagcccagaa gatgggtccag gcctgagtcc cttgctctga
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 1980
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 2040
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 2100
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 2160
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 2220
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 2267

<210> 5720

<211> 455

<212> PRT

<213> Homo sapiens

<400> 5720

Val	Pro	Val	Leu	His	Lys	His	Pro	Cys	His	Leu	Val	Thr	Ser	Pro	Pro
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Gln	Gln	Gln	Arg	Gly	His	Gly	Ala	Val	His	Ala	Ala	Gly	Gln	Gly	Ala
			20					25					30		
His	Asp	Val	Pro	Gln	Gly	Leu	His	Pro	Pro	Val	Ala	Pro	Ser	Gly	Gly
	35					40					45				
Val	Asp	Ser	Ala	Val	Ala	Ala	Leu	Leu	Leu	Arg	Arg	Arg	Gly	Tyr	Gln
	50				55					60					
Val	Thr	Gly	Val	Phe	Met	Lys	Asn	Trp	Asp	Ser	Leu	Asp	Glu	His	Gly
65					70				75					80	
Val	Cys	Thr	Ala	Asp	Lys	Asp	Cys	Glu	Asp	Ala	Tyr	Arg	Val	Cys	Gln
			85					90						95	
Ile	Leu	Asp	Ile	Pro	Phe	His	Gln	Val	Ser	Tyr	Val	Lys	Glu	Tyr	Trp
	100							105					110		
Asn	Asp	Val	Phe	Ser	Asp	Phe	Leu	Asn	Glu	Tyr	Glu	Lys	Gly	Arg	Thr
	115						120					125			
Pro	Asn	Pro	Asp	Ile	Val	Cys	Asn	Lys	His	Ile	Lys	Phe	Ser	Cys	Phe

130 135 140
 Phe His Tyr Ala Val Asp Asn Leu Gly Ala Asp Ala Ile Ala Thr Gly
 145 150 155 160
 His Tyr Ala Arg Thr Ser Leu Glu Asp Glu Glu Val Phe Glu Gln Lys
 165 170 175
 His Val Lys Lys Pro Glu Gly Leu Phe Arg Asn Arg Phe Glu Val Arg
 180 185 190
 Asn Ala Val Lys Leu Leu Gln Ala Ala Asp Ser Phe Lys Asp Gln Thr
 195 200 205
 Phe Phe Leu Ser Gln Val Ser Gln Asp Ala Leu Arg Arg Thr Ile Phe
 210 215 220
 Pro Leu Gly Gly Leu Thr Lys Glu Phe Val Lys Lys Ile Ala Ala Glu
 225 230 235 240
 Asn Arg Leu His His Val Leu Gln Lys Lys Glu Ser Met Gly Met Cys
 245 250 255
 Phe Ile Gly Lys Arg Asn Phe Glu His Phe Leu Leu Gln Tyr Leu Gln
 260 265 270
 Pro Arg Pro Gly His Phe Ile Ser Ile Glu Asp Asn Lys Val Leu Gly
 275 280 285
 Thr His Lys Gly Trp Phe Leu Tyr Thr Leu Gly Gln Arg Ala Asn Ile
 290 295 300
 Gly Gly Leu Arg Glu Pro Trp Tyr Val Val Glu Lys Asp Ser Val Lys
 305 310 315 320
 Gly Asp Val Phe Val Ala Pro Arg Thr Asp His Pro Ala Leu Tyr Arg
 325 330 335
 Asp Leu Leu Arg Thr Ser Arg Val His Trp Ile Ala Glu Glu Pro Pro
 340 345 350
 Ala Ala Leu Val Arg Asp Lys Met Met Glu Cys His Phe Arg Phe Arg
 355 360 365
 His Gln Met Ala Leu Val Pro Cys Val Leu Thr Leu Asn Gln Asp Gly
 370 375 380
 Thr Val Trp Val Thr Ala Val Gln Ala Val Arg Ala Leu Ala Thr Gly
 385 390 395 400
 Gln Phe Ala Val Phe Tyr Lys Gly Asp Glu Cys Leu Gly Ser Gly Lys
 405 410 415
 Ile Leu Arg Leu Gly Pro Ser Ala Tyr Thr Leu Gln Lys Gly Gln Arg
 420 425 430
 Arg Ala Gly Met Ala Thr Glu Ser Pro Ser Asp Ser Pro Glu Asp Gly
 435 440 445
 Pro Gly Leu Ser Pro Leu Leu
 450 455

<210> 5721

<211> 400

<212> DNA

<213> Homo sapiens

<400> 5721

ttagacatag ctaaccagac aggcagatca atcagaattc ccccatcaga aagaaaagcc

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cttatgttag ctatgggata tcatgagaag ggcagagctt tcctgaaaag aaaagaatat

120

ggaatagcct tgccatgtct gttggacgct gacaaatatt tctggtgggc gcttttgtac

180

ttggtgaaca ccagctttaa ggaagatggc ccagactata cagaacacct gccatgccct
 240
 tgagactgca gactttcatc tacaacagtg gttaatgtaa aagagtagtt atgggtgtaa
 300
 ctggtgaatt tcttcttccc tttgtatttc taattgacct ttcctccctg taaagaaaaag
 360
 aattttcaag caggtaggat atgctctctt tttctgtaca
 400

<210> 5722

<211> 80

<212> PRT

<213> Homo sapiens

<400> 5722

Leu	Asp	Ile	Ala	Asn	Gln	Thr	Gly	Arg	Ser	Ile	Arg	Ile	Pro	Pro	Ser
1				5				10					15		
Glu	Arg	Lys	Ala	Leu	Met	Leu	Ala	Met	Gly	Tyr	His	Glu	Lys	Gly	Arg
			20				25					30			
Ala	Phe	Leu	Lys	Arg	Lys	Glu	Tyr	Gly	Ile	Ala	Leu	Pro	Cys	Leu	Leu
		35				40				45					
Asp	Ala	Asp	Lys	Tyr	Phe	Trp	Trp	Ala	Leu	Leu	Tyr	Leu	Val	Asn	Thr
	50					55			60						
Ser	Phe	Lys	Glu	Asp	Gly	Pro	Asp	Tyr	Thr	Glu	His	Leu	Pro	Cys	Pro
65					70				75					80	

<210> 5723

<211> 376

<212> DNA

<213> Homo sapiens

<400> 5723

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 aagaatgtgg agagttttct agaagcctgt cgaaaaatgg ggggtgcctga ggtatggggg
 120
 ctgctttcta aagagtgggtg gcatgccgga ctcagcggag ccatgtggca tggatgggtg
 180
 gcttccattt gcagcggatg tctgctctca gatgaaggca caggctgccc ctgcctgccc
 240
 cagcatgccc cctgccctgc atgccccctg cctgcatgt cacctgtcct acacatcccc
 300
 tgccctgcag gcccatctt gtctgcatg tcacctgtcc tgcacatgcc ctgccctgca
 360
 ctctcctgc acgcgt
 376

<210> 5724

<211> 125

<212> PRT

<213> Homo sapiens

<400> 5724

Xaa Thr Thr Phe Ser Ser Phe His Pro Pro Gln Pro Lys Leu Ser Ala

1	5	10	15
Leu Lys Ala Arg Lys Asn Val Glu Ser Phe Leu Glu Ala Cys Arg Lys			
	20	25	30
Met Gly Val Pro Glu Val Trp Gly Leu Leu Ser Lys Glu Trp Trp His			
	35	40	45
Ala Gly Leu Ser Gly Ala Met Trp His Gly Trp Trp Ala Ser Ile Cys			
	50	55	60
Ser Gly Cys Leu Leu Ser Asp Glu Gly Thr Gly Cys Pro Cys Leu Pro			
65	70	75	80
Gln His Ala Pro Cys Pro Ala Cys Pro Leu Pro Cys Met Ser Pro Val			
	85	90	95
Leu His Ile Pro Cys Pro Ala Gly Pro Ile Leu Ser Cys Met Ser Pro			
	100	105	110
Val Leu His Met Pro Cys Pro Ala Leu Leu Leu His Ala			
	115	120	125

<210> 5725

<211> 1160

<212> DNA

<213> Homo sapiens

<400> 5725

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 120
 accgcgcacg ggcgagcatg gggggcaagc agagcacggc gaccgctcc cgggggcccc
 180
 ttcccggggg tctccaccga tgacagcgcc gtgccgccgc cgggaggggc gccccatttc
 240
 gggcactacc ggacgggcgg cggggccatg gggctgcgca gcgcatcggt cagctcggtg
 300
 gcaggcatgg gcatggaccc cagcacggcc gggggggtgc cttttggcct ctacaccccc
 360
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 420
 tccacctatg cccatggcaa tggttaccag gagacgggcg gcggtcacca tagagacggg
 480
 atgctgtacc tgggctcccg agcctcgctg gcggatgctc tacctctgca catcgacccc
 540
 aggtgggtta gctcgcatag tggtttcaag tgccccattt gctccaagtc tgtggcttct
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 660
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 720
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 780
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 840
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 900
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 960

tcattggttct cccttctctcc ctgaggacac caaattggat gagagcaagt ttgagagaag
 1020
 aatgaatcaa ctgctatcct tcccctcacc cctcagccca ggaggggaaag ggcattttct
 1080
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 1140
 aaaaaaagtc tagtgctgac
 1160

<210> 5726

<211> 273

<212> PRT

<213> Homo sapiens

<400> 5726

Ala	Phe	Phe	Pro	Phe	Leu	Pro	Pro	Arg	Leu	Leu	Phe	Asp	Ser	Leu	Pro
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Leu	Tyr	Ala	Arg	Pro	Ala	Leu	Pro	Leu	Leu	Leu	Arg	Ser	Gly	Gly	Gly
			20					25					30		
Ser	Arg	Pro	Pro	Gly	Ser	Arg	Pro	Thr	Ala	His	Gly	Arg	Ala	Trp	Gly
		35					40					45			
Ala	Ser	Arg	Ala	Arg	Arg	Pro	Ala	Pro	Gly	Gly	Pro	Phe	Pro	Gly	Val
	50				55						60				
Ser	Thr	Asp	Asp	Ser	Ala	Val	Pro	Pro	Pro	Gly	Gly	Ala	Pro	His	Phe
65					70					75				80	
Gly	His	Tyr	Arg	Thr	Gly	Gly	Gly	Ala	Met	Gly	Leu	Arg	Ser	Ala	Ser
			85					90					95		
Val	Ser	Ser	Val	Ala	Gly	Met	Gly	Met	Asp	Pro	Ser	Thr	Ala	Gly	Gly
			100					105					110		
Val	Pro	Phe	Gly	Leu	Tyr	Thr	Pro	Ala	Ser	Arg	Gly	Thr	Gly	Asp	Ser
	115						120					125			
Glu	Arg	Ala	Pro	Gly	Gly	Gly	Gly	Ser	Ala	Ser	Asp	Ser	Thr	Tyr	Ala
	130				135						140				
His	Gly	Asn	Gly	Tyr	Gln	Glu	Thr	Gly	Gly	Gly	His	His	Arg	Asp	Gly
145					150					155				160	
Met	Leu	Tyr	Leu	Gly	Ser	Arg	Ala	Ser	Leu	Ala	Asp	Ala	Leu	Pro	Leu
			165					170					175		
His	Ile	Ala	Pro	Arg	Trp	Phe	Ser	Ser	His	Ser	Gly	Phe	Lys	Cys	Pro
			180					185					190		
Ile	Cys	Ser	Lys	Ser	Val	Ala	Ser	Asp	Glu	Met	Glu	Met	His	Phe	Ile
	195						200					205			
Met	Cys	Leu	Ser	Lys	Pro	Arg	Leu	Ser	Tyr	Asn	Asp	Asp	Val	Leu	Thr
	210					215					220				
Lys	Asp	Ala	Gly	Glu	Cys	Val	Ile	Cys	Leu	Glu	Glu	Leu	Leu	Gln	Gly
225					230					235				240	
Asp	Thr	Ile	Ala	Arg	Leu	Pro	Cys	Leu	Cys	Ile	Tyr	His	Lys	Ser	Cys
			245					250					255		
Ile	Asp	Ser	Trp	Phe	Glu	Val	Asn	Arg	Ser	Cys	Pro	Glu	His	Pro	Ala
			260					265					270		

Asp

<210> 5727

<211> 1237

<212> DNA

<213> Homo sapiens

<400> 5727

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120
gagatcctaa ggaccttgag ccccgaggag ctagagcagc tggactgcga actacaggag
180
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240
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300
gaagtcaaag agcgtgatga cttggtgccc ttcacaggcg agaagaaggg gaaaccctat
360
attcagccca agaggggaaat cccagcagag gagcagatca ccctggagcc tgagctggag
420
gaggcactgg cacatgccac agatgctgaa atgtgtgaca ttgcagcaat tctggacatg
480
tacacactga tgagtaacaa gcaatactat gatgccctct gcagtggaga aatctgcaac
540
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600
ccaaatccca caaacattga ggagatacta aagagggtcc gaagcaatga caaggagctg
660
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720
gaggcaatga aggcaaatac ctatgtgcgg agcttcagtc tggtagccac gaggagtggg
780
gacccattg ccaatgcagt ggctgacatg ttgcgtgaga atcgtagcct ccagagccta
840
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900
gaaaatgcc aactcactga gctccgtgta gacaatcagc gccagtggcc tggatgatgca
960
gtggagatgg agatggccac cgtgctagag cagtgtccct ctattgtccg ctttggctac
1020
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1080
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1140
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1200
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaa
1237

<210> 5728

<211> 368

<212> PRT

<213> Homo sapiens

<400> 5728

Xaa Arg Arg Glu Val Thr Thr Arg Thr Gly Ser Val Ser Thr Thr Gln

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Trp Glu Gly Val Gly Ala Thr Met Ser Ser Tyr Gln Lys Glu Leu Glu			
20	25	30	
Lys Tyr Arg Asp Ile Asp Glu Asp Glu Ile Leu Arg Thr Leu Ser Pro			
35	40	45	
Glu Glu Leu Glu Gln Leu Asp Cys Glu Leu Gln Glu Met Asp Pro Glu			
50	55	60	
Asn Met Leu Leu Pro Ala Gly Leu Arg Gln Arg Asp Gln Thr Lys Lys			
65	70	75	80
Ser Pro Thr Gly Pro Leu Asp Arg Glu Ala Leu Leu Gln Tyr Leu Glu			
85	90	95	
Gln Gln Ala Leu Glu Val Lys Glu Arg Asp Asp Leu Val Pro Phe Thr			
100	105	110	
Gly Glu Lys Lys Gly Lys Pro Tyr Ile Gln Pro Lys Arg Glu Ile Pro			
115	120	125	
Ala Glu Glu Gln Ile Thr Leu Glu Pro Glu Leu Glu Glu Ala Leu Ala			
130	135	140	
His Ala Thr Asp Ala Glu Met Cys Asp Ile Ala Ala Ile Leu Asp Met			
145	150	155	160
Tyr Thr Leu Met Ser Asn Lys Gln Tyr Tyr Asp Ala Leu Cys Ser Gly			
165	170	175	
Glu Ile Cys Asn Thr Glu Gly Ile Ser Ser Val Val Gln Pro Asp Lys			
180	185	190	
Tyr Lys Pro Val Pro Asp Glu Pro Pro Asn Pro Thr Asn Ile Glu Glu			
195	200	205	
Ile Leu Lys Arg Val Arg Ser Asn Asp Lys Glu Leu Glu Glu Val Asn			
210	215	220	
Leu Asn Asn Ile Gln Asp Ile Pro Ile Pro Met Leu Ser Glu Leu Cys			
225	230	235	240
Glu Ala Met Lys Ala Asn Thr Tyr Val Arg Ser Phe Ser Leu Val Ala			
245	250	255	
Thr Arg Ser Gly Asp Pro Ile Ala Asn Ala Val Ala Asp Met Leu Arg			
260	265	270	
Glu Asn Arg Ser Leu Gln Ser Leu Asn Ile Glu Ser Asn Phe Ile Ser			
275	280	285	
Ser Thr Gly Leu Met Ala Val Leu Lys Ala Val Arg Glu Asn Ala Thr			
290	295	300	
Leu Thr Glu Leu Arg Val Asp Asn Gln Arg Gln Trp Pro Gly Asp Ala			
305	310	315	320
Val Glu Met Glu Met Ala Thr Val Leu Glu Gln Cys Pro Ser Ile Val			
325	330	335	
Arg Phe Gly Tyr His Phe Thr Gln Gln Gly Pro Arg Ala Arg Ala Ala			
340	345	350	
Gln Ala Met Thr Arg Asn Asn Glu Leu Arg Arg Gln Gln Lys Lys Arg			
355	360	365	

<210> 5729

<211> 381

<212> DNA

<213> Homo sapiens

<400> 5729

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 120
 cagccagatg cgcctcaggt ctttctcgaa cttgatctgc aagacgcaga gagagggacc
 180
 gccaaagtaat tcgtggcaaa gaaacgtgtt ctcagcactt tgccctccca gggccaagca
 240
 gggggccact cacctgcttg cgtctcaggc gtccctctg gaccttctc cgcaggaacc
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 360
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<210> 5730

<211> 64

<212> PRT

<213> Homo sapiens

<400> 5730

Phe	Val	Ala	Lys	Lys	Arg	Val	Leu	Ser	Thr	Leu	Pro	Ser	Gln	Gly	Gln
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Ala	Gly	Gly	His	Ser	Pro	Ala	Cys	Val	Ser	Gly	Val	Pro	Pro	Gly	Pro
			20				25					30			
Ser	Ser	Ala	Gly	Thr	Ala	Ser	Ser	Ser	Pro	Ala	Ser	Gly	Thr	Cys	Gly
		35					40					45			
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<210> 5731

<211> 891

<212> DNA

<213> Homo sapiens

<400> 5731

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 360
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 420
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 480
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 660
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 780
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 840
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 891

<210> 5732

<211> 193

<212> PRT

<213> Homo sapiens

<400> 5732

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Arg	Arg	Ala	Leu	Ala	Gln	Tyr	Leu	Leu	Phe	Leu	Arg	Leu	Tyr	Pro	Val
		20					25					30			
Leu	Thr	Lys	Ala	Ala	Thr	Ser	Gly	Ile	Leu	Ser	Ala	Leu	Gly	Asn	Phe
		35				40					45				
Leu	Ala	Gln	Met	Ile	Glu	Lys	Lys	Arg	Lys	Lys	Glu	Asn	Ser	Arg	Ser
	50				55					60					
Leu	Asp	Val	Gly	Gly	Pro	Leu	Arg	Tyr	Ala	Val	Tyr	Gly	Phe	Phe	Phe
65				70					75					80	
Thr	Gly	Pro	Leu	Ser	His	Phe	Phe	Tyr	Phe	Phe	Met	Glu	His	Trp	Ile
			85					90						95	
Pro	Pro	Glu	Val	Pro	Leu	Ala	Gly	Leu	Arg	Arg	Leu	Leu	Leu	Asp	Arg
		100					105					110			
Leu	Val	Phe	Ala	Pro	Ala	Phe	Leu	Met	Leu	Phe	Phe	Leu	Ile	Met	Asn
		115				120					125				
Phe	Leu	Glu	Gly	Lys	Asp	Ala	Ser	Ala	Phe	Ala	Ala	Lys	Met	Arg	Gly
	130					135					140				
Gly	Phe	Trp	Pro	Ala	Leu	Arg	Met	Asn	Trp	Arg	Val	Trp	Thr	Pro	Leu
145				150					155					160	
Gln	Phe	Ile	Asn	Ile	Asn	Tyr	Val	Pro	Leu	Lys	Phe	Arg	Val	Leu	Phe
			165				170						175		
Ala	Asn	Leu	Ala	Ala	Leu	Phe	Trp	Tyr	Ala	Tyr	Leu	Ala	Ser	Leu	Gly
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Lys

<210> 5733

<211> 950

<212> DNA

<213> Homo sapiens

<400> 5733

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 120

gtcagctata ctttctcttt ctggctgccc ctgtacatca cgaatgtgga tcaccttgat
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 360
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 420
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 840
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<210> 5734

<211> 82

<212> PRT

<213> Homo sapiens

<400> 5734

Xaa	His	Val	Val	Ile	Leu	Pro	Gly	Asp	Gly	Gly	Ser	Gly	Thr	Ala	Ala
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Ile	Ser	Phe	Thr	Gly	Ala	Leu	Lys	Ile	Pro	Gly	Val	Ile	Glu	Phe	Ser
			20					25					30		
Leu	Cys	Leu	Leu	Phe	Ala	Lys	Leu	Val	Ser	Tyr	Thr	Phe	Leu	Phe	Trp
		35					40					45			
Leu	Pro	Leu	Tyr	Ile	Thr	Asn	Val	Asp	His	Leu	Asp	Ala	Lys	Lys	Ala
	50					55				60					
Gly	Cys	Thr	Gly	Ser	Pro	Asp	Pro	Leu	Arg	His	Ser	Ser	His	Arg	Thr
65					70					75					80
Ser	Lys														

<210> 5735

<211> 4241

<212> DNA

<213> Homo sapiens

<400> 5735

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180
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240
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<210> 5736

<211> 327

<212> PRT

<213> Homo sapiens

<400> 5736

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			20					25					30		
Thr	Val	Arg	Gly	Glu	Arg	Ser	Tyr	Ser	Trp	Gly	Met	Ala	Val	Asn	Val
			35					40				45			
Tyr	Ser	Thr	Ser	Ile	Thr	Gln	Glu	Thr	Met	Ser	Arg	His	Asp	Ile	Ile
			50				55				60				
Ala	Trp	Val	Asn	Asp	Ile	Val	Ser	Leu	Asn	Tyr	Thr	Lys	Val	Glu	Gln
65					70					75				80	
Leu	Cys	Ser	Gly	Ala	Ala	Tyr	Cys	Gln	Phe	Met	Asp	Met	Leu	Phe	Pro
				85					90				95		
Gly	Cys	Ile	Ser	Leu	Lys	Lys	Val	Lys	Phe	Gln	Ala	Lys	Leu	Glu	His

	100		105		110
Glu Tyr Ile His Asn Phe Lys Leu Leu Gln Ala Ser Phe Lys Arg Met					
115		120		125	
Asn Val Asp Lys Val Ile Pro Val Glu Lys Leu Val Lys Gly Arg Phe					
130		135		140	
Gln Asp Asn Leu Asp Phe Ile Gln Trp Phe Lys Lys Phe Tyr Asp Ala					
145		150		155	160
Asn Tyr Asp Gly Lys Glu Tyr Asp Pro Val Glu Ala Arg Gln Gly Gln					
	165		170		175
Asp Ala Ile Pro Pro Pro Asp Pro Gly Glu Gln Ile Phe Asn Leu Pro					
	180		185		190
Lys Lys Ser His His Ala Asn Ser Pro Thr Ala Gly Ala Ala Lys Ser					
	195		200		205
Ser Pro Ala Ala Lys Pro Gly Ser Thr Pro Ser Arg Pro Ser Ser Ala					
	210		215		220
Lys Arg Ala Ser Ser Ser Gly Ser Ala Ser Lys Ser Asp Lys Asp Leu					
225		230		235	240
Glu Thr Gln Val Ile Gln Leu Asn Glu Gln Val His Ser Leu Lys Leu					
	245		250		255
Ala Leu Glu Gly Val Glu Lys Glu Arg Asp Phe Tyr Phe Gly Lys Leu					
	260		265		270
Arg Glu Ile Glu Leu Leu Cys Gln Glu His Gly Gln Glu Asn Asp Asp					
	275		280		285
Leu Val Gln Arg Leu Met Asp Ile Leu Tyr Ala Ser Glu Glu His Glu					
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Gly His Thr Glu Glu Pro Glu Ala Glu Glu Gln Ala His Glu Gln Gln					
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Pro Pro Gln Gln Glu Tyr					
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<210> 5737

<211> 340

<212> DNA

<213> Homo sapiens

<400> 5737

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180

ctgccagtga tgaccggtgg tttcctgatg tacctgagag ggcagctgga gcctcagtgg

240

aagatgttgc agtgccatcc tcacctggtg gcttgaaatc ggccaagggtg ggagcattta

300

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340

<210> 5738

<211> 99

<212> PRT

<213> Homo sapiens

<400> 5738

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Gln His Leu Pro Leu Arg Leu Gln Leu Pro Ser Gln Val His Gln Glu
      20          25          30
Thr Thr Gly His His Trp Gln Trp Arg Gly Asp Met Glu His Gly Leu
      35          40          45
Gly Ser Arg Leu Leu Ala Pro Asp Val Gln Pro Gln Thr Pro Pro Val
      50          55          60
Met Gly Glu Val Trp Arg Pro Val Gln Leu Ser Gln Gly His Ala His
65          70          75          80
Leu Ser Leu Gly Ser Val Gly Lys Ala Tyr Pro Lys Ser His Ile Gln
      85          90          95
Gly Gly Xaa

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<210> 5739

<211> 780

<212> DNA

<213> Homo sapiens

<400> 5739

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120
ttactcgta attggaacaa cctctagcct gtactaaatt tccatattta ttggcccggt
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<210> 5740

<211> 120

<212> PRT

<213> Homo sapiens

<400> 5740

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 20 25 30
 Leu Pro Val Cys Gly Gly Gln Lys Arg Lys Thr Thr Gln Gly Glu Cys
 35 40 45
 Leu Leu Pro Pro Ala Gly Lys Gln Leu Gly His His Leu Ser Glu Ser
 50 55 60
 Arg Cys Cys Ser Ser Trp Gln Gln Ser His Ser Glu Arg Ser Cys Val
 65 70 75 80
 His Cys Leu Ser Gly Arg Pro Cys Gln Ser Pro Ser Leu Pro Pro Pro
 85 90 95
 Tyr Leu Cys Arg Lys Pro Gly His His His Phe Lys Ala Leu Pro Ser
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 Phe Leu Gly Arg Ala Gln Pro Gln
 115 120

<210> 5741

<211> 2444

<212> DNA

<213> Homo sapiens

<400> 5741

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<211> 427

<212> PRT

<213> Homo sapiens

<400> 5742

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 305 310 315 320
 Pro Glu Leu His Ala Glu Leu Gly Met Lys Pro Pro Ser Pro Gly Thr
 325 330 335
 Val Leu Ala Leu Ala Lys Pro Pro Ser Pro Cys Ala Pro Gly Thr Ser
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 Ser Gln Phe Ser Ala Gly Ala Asp Arg Ala Thr Ser Pro Leu Val Ser
 355 360 365
 Leu Tyr Pro Ala Leu Glu Cys Arg Ala Leu Ile Gln Gln Met Ser Pro
 370 375 380
 Ser Ala Phe Gly Leu Asn Asp Trp Asp Asp Asp Glu Ile Leu Ala Ser

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 <211> 550
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 <213> Homo sapiens

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 Gly Gly Arg Pro Pro Lys Gly Pro Arg Thr Gly Arg Pro Ala Pro Ser
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 Pro Gly Ser Pro Pro Arg Glu Ser Arg Cys Leu Ala Pro Xaa Asp Pro
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<210> 5745
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<212> DNA

<213> Homo sapiens

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<210> 5746

<211> 140

<212> PRT

<213> Homo sapiens

<400> 5746

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 Tyr Gln Val Phe Ser Gly His Tyr Asp Leu Phe Pro Tyr Asn Ser Asp

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			Ser	Ala	Gly
			Gly	Gly	Ser
			Gln	Arg	
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<210> 5747

<211> 1999

<212> DNA

<213> Homo sapiens

<400> 5747

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<210> 5748

<211> 492

<212> PRT

<213> Homo sapiens

<400> 5748

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 Arg Tyr Leu Ser Pro Gly Trp Gly Ser Ala Ser Glu Glu Glu Pro Ser
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 Arg Gly His Ser Gly Thr Thr Ala Ser Gly Gly Glu Asn Glu Arg Glu
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 Asp Trp Arg Thr Thr Ala His Ala Leu Lys Tyr Ser Val Val Leu Glu
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 Leu Asn Glu Asp His Arg Lys Val Arg Arg Thr Thr Pro Val Pro Leu

165 170 175
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<210> 5749

<211> 2849

<212> DNA

<213> Homo sapiens

<400> 5749

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<211> 522

<212> PRT

<213> Homo sapiens

<400> 5750

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Asn	Leu	Phe	Arg	Leu	Ile	Lys	Arg	Leu	Asp	Leu	Ser	Tyr	Asn	Arg	Ile
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 <212> DNA
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<210> 5752
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<400> 5752
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<210> 5753

<211> 5668

<212> DNA

<213> Homo sapiens

<400> 5753

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<210> 5754

<211> 221

<212> PRT

<213> Homo sapiens

<400> 5754

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Ser Ser Arg Met Arg Lys Leu Pro Gln Gly Arg Pro Val Pro Pro Leu
      50           55           60
Gly Pro Glu Thr Arg Val Ser Val Val Trp Val Glu Arg Tyr Asp Asp
      65           70           75           80
Ile Glu Asn Phe Pro Leu Ser Glu Leu Met Thr Glu Ile Ser Thr Gly
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Val Glu Thr Thr Ala Asn Ser Ser Thr Ser Leu Arg Ser Thr Thr Leu
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Glu Lys Glu Val Pro Val Ile Phe Ile His Pro Leu Asn Thr Gly Leu
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Phe Arg Ile Lys Ile Gln Gly Ala Thr Gly Lys Phe Asn Met Val Ile
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Asp Ser Tyr Ser Pro Pro His Val Arg Arg Lys Gln Lys Ile Thr Asp
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<210> 5755

<211> 1513

<212> DNA

<213> Homo sapiens

<400> 5755

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<210> 5756

<211> 415

<212> PRT

<213> Homo sapiens

<400> 5756

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Asn Leu His Asn Pro Ala Leu Phe Glu Gly Arg Ser Pro Ala Val Trp
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Lys Glu Lys Ala Gly Ala Arg Ser Lys Arg Ala Leu Glu Glu Glu Glu
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<210> 5757

<211> 2362

<212> DNA

<213> Homo sapiens

<400> 5757

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<211> 440

<212> PRT

<213> Homo sapiens

<400> 5758

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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<210> 5766

<211> 873

<212> PRT

<213> Homo sapiens

<400> 5766

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 Val Pro Leu Ala Cys Ala Trp Ser Cys Arg Asn Leu Ile Ala Phe Thr
 35 40 45
 Met Asp Leu Arg Ser Asp Asp Gln Asp Leu Thr Arg Met Ile His Ile
 50 55 60
 Leu Asp Thr Glu His Pro Trp Asp Leu His Ser Ile Pro Ser Glu His
 65 70 75 80
 His Glu Ala Ile Thr Cys Leu Glu Trp Asp Gln Ser Gly Ser Arg Leu
 85 90 95
 Leu Ser Ala Asp Ala Asp Gly Gln Ile Lys Cys Trp Ser Met Ala Asp
 100 105 110
 His Leu Ala Asn Ser Trp Glu Ser Ser Val Gly Ser Leu Val Glu Gly
 115 120 125
 Asp Pro Ile Val Ala Leu Ser Trp Leu His Asn Gly Val Lys Leu Ala
 130 135 140
 Leu His Val Glu Lys Ser Gly Ala Ser Ser Phe Gly Glu Lys Phe Ser
 145 150 155 160
 Arg Val Lys Phe Ser Pro Ser Leu Thr Leu Phe Gly Gly Lys Pro Met
 165 170 175
 Glu Gly Trp Ile Ala Val Thr Val Ser Gly Leu Val Thr Val Ser Leu
 180 185 190
 Leu Lys Pro Ser Gly Gln Val Leu Thr Ser Thr Glu Ser Leu Cys Arg
 195 200 205
 Leu Arg Gly Arg Val Ala Leu Ala Asp Ile Ala Phe Thr Gly Gly Gly
 210 215 220
 Asn Ile Val Val Ala Thr Ala Asp Gly Ser Ser Ala Ser Pro Val Gln
 225 230 235 240
 Phe Tyr Lys Val Cys Val Ser Val Val Ser Glu Lys Cys Arg Ile Asp
 245 250 255
 Thr Glu Ile Leu Pro Ser Leu Phe Met Arg Cys Thr Thr Asp Leu Asn
 260 265 270
 Arg Lys Asp Lys Phe Pro Ala Ile Thr His Leu Lys Phe Leu Ala Arg
 275 280 285
 Asp Met Ser Glu Gln Val Leu Leu Cys Ala Ser Ser Gln Thr Ser Ser
 290 295 300
 Ile Val Glu Cys Trp Ser Leu Arg Lys Glu Gly Leu Pro Val Asn Asn
 305 310 315 320
 Ile Phe Gln Gln Ile Ser Pro Val Val Gly Asp Lys Gln Pro Thr Ile
 325 330 335
 Leu Lys Trp Arg Ile Leu Ser Ala Thr Asn Asp Leu Asp Arg Val Ser

340	345	350
Ala Val Ala Leu Pro Lys Leu Pro Ile Ser Leu Thr Asn Thr Asp Leu		
355	360	365
Lys Val Ala Ser Asp Thr Gln Phe Tyr Pro Gly Leu Gly Leu Ala Leu		
370	375	380
Ala Phe His Asp Gly Ser Val His Ile Val His Arg Leu Ser Leu Gln		
385	390	395
Thr Met Ala Val Phe Tyr Ser Ser Ala Ala Pro Arg Pro Val Asp Glu		
405	410	415
Pro Ala Met Lys Arg Pro Arg Thr Ala Gly Pro Ala Val His Leu Lys		
420	425	430
Ala Met Gln Leu Ser Trp Thr Ser Leu Ala Leu Val Gly Ile Asp Ser		
435	440	445
His Gly Lys Leu Ser Val Leu Arg Leu Ser Pro Ser Met Gly His Pro		
450	455	460
Leu Glu Val Gly Leu Ala Leu Arg His Leu Leu Phe Leu Leu Glu Tyr		
465	470	475
Cys Met Val Thr Gly Tyr Asp Trp Trp Asp Ile Leu Leu His Val Gln		
485	490	495
Pro Ser Met Val Gln Ser Leu Val Glu Lys Leu His Glu Glu Tyr Thr		
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Arg Gln Thr Ala Ala Leu Gln Gln Val Leu Ser Thr Arg Ile Leu Ala		
515	520	525
Met Lys Ala Ser Leu Cys Lys Leu Ser Pro Cys Thr Val Thr Arg Val		
530	535	540
Cys Asp Tyr His Thr Lys Leu Phe Leu Ile Ala Ile Ser Ser Thr Leu		
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Lys Ser Leu Leu Arg Pro His Phe Leu Asn Thr Pro Asp Lys Ser Pro		
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Gly Asp Arg Leu Thr Glu Ile Cys Thr Lys Ile Thr Asp Val Asp Ile		
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Asp Lys Val Met Ile Asn Leu Lys Thr Glu Glu Phe Val Leu Asp Met		
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Thr His Cys Arg Arg Cys Ser Ser Cys Ser Gly Trp Ala Thr Ser		
610	615	620
Cys Cys Thr Cys Trp Pro Ala Tyr Pro Thr Ser Pro Ala Pro Pro Arg		
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Ser Pro Ala Pro Pro Arg Ser Pro Pro Pro Pro Arg Ser Pro Pro Pro		
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Pro Arg Ser Pro Pro Leu His Glu Ala Ser Ala Gly Ser Leu Leu Arg		
660	665	670
Pro Gly His Ser Phe Leu Arg Asp Gly Thr Ser Leu Gly Met Leu Arg		
675	680	685
Glu Leu Met Val Val Ile Arg Ile Trp Gly Leu Leu Lys Pro Ser Cys		
690	695	700
Leu Pro Val Tyr Thr Ala Thr Ser Asp Thr Gln Asp Ser Met Ser Leu		
705	710	715
Leu Phe Arg Leu Leu Thr Lys Leu Trp Ile Cys Cys Arg Asp Glu Gly		
725	730	735
Pro Ala Ser Glu Pro Asp Glu Ala Leu Val Asp Glu Cys Cys Leu Leu		
740	745	750
Pro Ser Gln Leu Leu Ile Pro Ser Leu Asp Trp Leu Pro Ala Ser Asp		
755	760	765
Gly Leu Val Ser Arg Leu Gln Pro Lys Gln Pro Leu Arg Leu Gln Phe		

770		775		780
Gly Arg Ala Pro Thr Leu Pro Gly Ser Ala Ala Thr Leu Gln Leu Asp				
785		790		800
Gly Leu Ala Arg Ala Pro Gly Gln Pro Lys Ile Asp His Leu Arg Arg				
	805		810	815
Leu His Leu Gly Ala Cys Pro Thr Glu Glu Cys Lys Ala Cys Thr Arg				
	820	825		830
Cys Gly Cys Val Thr Met Leu Lys Ser Pro Asn Arg Thr Thr Ala Val				
	835	840		845
Lys Gln Trp Glu Gln Arg Trp Ile Lys Asn Cys Leu Cys Gly Gly Leu				
	850	855		860
Trp Trp Arg Val Pro Leu Ser Tyr Pro				
865		870		

<210> 5767
 <211> 1910
 <212> DNA
 <213> Homo sapiens

<400> 5767
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 180
 gccaggagag accctgaggg ctgcctcacc acagcaggaa cgccttctc agtcccagcc
 240
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 300
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 360
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 480
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 ctgaaaaaga ctgtgaaaat atatattctca aaagagaaca aggcatagtc agaaggctca
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 gtaaaacaat tactttaaaa gctgactaat aaaaagggtg agtgaaagaa ctcttccatc
 660
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 720
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 780
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 1020

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 1800
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<210> 5768

<211> 360

<212> PRT

<213> Homo sapiens

<400> 5768

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 20 25 30
 Thr Cys Glu Asn Trp Arg Glu Ile His His Leu Val Phe His Val Ala
 35 40 45
 Asn Ile Cys Phe Ala Val Gly Leu Val Ile Pro Thr Thr Leu His Leu
 50 55 60
 His Met Ile Phe Leu Arg Gly Met Leu Thr Leu Gly Cys Thr Leu Tyr
 65 70 75 80
 Ile Val Trp Ala Thr Leu Tyr Arg Cys Ala Leu Asp Ile Met Ile Trp
 85 90 95
 Asn Ser Val Phe Leu Gly Val Asn Ile Leu His Leu Ser Tyr Leu Leu
 100 105 110
 Tyr Lys Lys Arg Pro Val Lys Ile Glu Lys Glu Leu Ser Gly Met Tyr
 115 120 125
 Arg Arg Leu Phe Glu Pro Leu Arg Val Pro Pro Asp Leu Phe Arg Arg

130	135	140
Leu Thr Gly Gln Phe Cys Met Ile Gln Thr	Leu Lys Lys Gly Gln Thr	
145	150	155
Tyr Ala Ala Glu Asp Lys Thr Ser Val Asp Asp Arg Leu Ser Ile Leu		160
	165	170
Leu Lys Gly Lys Met Lys Val Ser Tyr Arg Gly His Phe Leu His Asn		175
	180	185
Ile Tyr Pro Cys Ala Phe Ile Asp Ser Pro Glu Phe Arg Ser Thr Gln		190
	195	200
Met His Lys Gly Glu Lys Phe Gln Val Thr Ile Ile Ala Asp Asp Asn		205
	210	215
Cys Arg Phe Leu Cys Trp Ser Arg Glu Arg Leu Thr Tyr Phe Leu Glu		220
225	230	235
Ser Glu Pro Phe Leu Tyr Glu Ile Phe Arg Tyr Leu Ile Gly Lys Asp		240
	245	250
Ile Thr Asn Lys Leu Tyr Ser Leu Asn Asp Pro Thr Leu Asn Asp Lys		255
	260	265
Lys Ala Lys Lys Leu Glu His Gln Leu Ser Leu Cys Thr Gln Ile Ser		270
	275	280
Met Leu Glu Met Arg Asn Ser Ile Ala Ser Ser Ser Asp Ser Asp Asp		285
	290	295
Gly Leu His Gln Phe Leu Arg Ser Thr Ser Ser Met Ser Ser Leu His		300
305	310	315
Val Ser Ser Pro His Gln Arg Ala Ser Ala Lys Met Lys Pro Ile Glu		320
	325	330
Glu Gly Ala Glu Asp Asp Asp Asp Val Phe Glu Pro Ala Ser Pro Asn		335
	340	345
Thr Leu Lys Val His Gln Leu Pro		350
	355	360

<210> 5769

<211> 427

<212> DNA

<213> Homo sapiens

<400> 5769

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120

ctgcagacac agctgaagga agtattaaga gaaaatgatc tcttgcgga ggatgtggaa

180

gtaaaggaga gcaaattgag ttcttcaatg aatagcatca agatcttctg gggcccagag

240

ctgaagaagg aacgagccct gagaaaggat gaagcttcca aaatcccat ttggaaggaa

300

cagtagagag ttgtacaaga ggaaaaccag gtaagtctta cgtgtgttta cttttattgg

360

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427

<210> 5770

<211> 85
 <212> PRT
 <213> Homo sapiens

<400> 5770
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 Ile Lys Ile Phe Trp Gly Pro Glu Leu Lys Lys Glu Arg Ala Leu Arg
 35 40 45
 Lys Asp Glu Ala Ser Lys Ile Pro Ile Trp Lys Glu Gln Tyr Arg Val
 50 55 60
 Val Gln Glu Glu Asn Gln Val Ser Ser Thr Cys Val Tyr Leu Tyr Trp
 65 70 75 80
 Leu Asn Ser Cys Ile
 85

<210> 5771
 <211> 2539
 <212> DNA
 <213> Homo sapiens

<400> 5771
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 420
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 480
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 720
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<210> 5772

<211> 642

<212> PRT

<213> Homo sapiens

<400> 5772

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20 25 30
Val Arg Cys Ala Thr Pro Pro Gln Leu Ala Asn Gly Val Thr Glu Gly
35 40 45
Leu Asp Tyr Gly Phe Met Lys Glu Val Thr Phe His Cys His Gly Leu
50 55 60
His Leu Ala Arg Cys Ser Lys Thr His Leu Ser Val Arg Gly Asn Trp
65 70 75 80
Asp Ala Glu Ile Pro Leu Cys Lys Pro Val Asn Cys Gly Pro Pro Glu
85 90 95
Asp Leu Ala His Gly Phe Pro Asn Gly Phe Ser Phe Ile His Gly Gly
100 105 110
His Ile Gln Tyr Gln Cys Phe Pro Gly Tyr Lys Leu His Gly Asn Ser
115 120 125
Ser Arg Arg Cys Leu Ser Asn Gly Ser Trp Ser Gly Ser Ser Pro Ser
130 135 140
Cys Leu Pro Cys Arg Cys Ser Thr Pro Val Ile Glu Tyr Gly Thr Val
145 150 155 160
Asn Gly Thr Asp Phe Asp Cys Gly Lys Ala Ala Arg Ile Gln Cys Phe
165 170 175
Lys Gly Phe Lys Leu Leu Gly Leu Ser Glu Ile Thr Cys Glu Ala Asp
180 185 190
Gly Gln Trp Ser Ser Gly Phe Pro His Cys Glu His Thr Ser Cys Gly
195 200 205
Ser Leu Pro Met Ile Pro Asn Ala Phe Ile Ser Glu Thr Ser Ser Trp
210 215 220
Lys Glu Asn Val Ile Thr Tyr Ser Cys Arg Ser Gly Tyr Val Ile Gln
225 230 235 240
Gly Ser Ser Asp Leu Ile Cys Thr Glu Lys Gly Val Trp Asn Gln Pro
245 250 255
Tyr Pro Val Cys Glu Pro Leu Ser Cys Gly Ser Pro Pro Ser Val Ala
260 265 270
Asn Ala Val Ala Thr Gly Glu Ala His Thr Tyr Glu Ser Glu Val Lys
275 280 285
Leu Arg Cys Leu Glu Gly Tyr Thr Met Asp Thr Asp Thr Asp Thr Ile
290 295 300
Thr Cys Gln Lys Asp Gly Arg Trp Phe Pro Glu Arg Ile Ser Cys Ser
305 310 315 320
Pro Lys Lys Cys Pro Leu Pro Glu Asn Ile Thr His Ile Leu Val His
325 330 335
Gly Asp Asp Phe Ser Val Asn Arg Gln Val Ser Val Ser Cys Ala Glu
340 345 350
Gly Tyr Thr Phe Glu Gly Val Asn Ile Ser Val Cys Gln Leu Asp Gly

355	360	365
Thr Trp Glu Pro Pro Phe Ser Asp Glu Ser Cys Ser Pro Val Ser Cys		
370	375	380
Gly Lys Pro Glu Ser Pro Glu His Gly Phe Val Val Gly Ser Lys Tyr		
385	390	395
Thr Phe Glu Ser Thr Ile Ile Tyr Gln Cys Glu Pro Gly Tyr Glu Leu		
405	410	415
Glu Gly Asn Arg Glu Arg Val Cys Gln Glu Asn Arg Gln Trp Ser Gly		
420	425	430
Gly Val Ala Ile Cys Lys Glu Thr Arg Cys Glu Thr Pro Leu Glu Phe		
435	440	445
Leu Asn Gly Lys Ala Asp Ile Glu Asn Arg Thr Thr Gly Pro Asn Val		
450	455	460
Val Tyr Ser Cys Asn Arg Gly Tyr Ser Leu Glu Gly Pro Ser Glu Ala		
465	470	475
His Cys Thr Glu Asn Gly Thr Trp Ser His Pro Val Pro Leu Cys Lys		
485	490	495
Pro Asn Pro Cys Pro Val Pro Phe Val Ile Pro Glu Asn Ala Leu Leu		
500	505	510
Ser Glu Lys Glu Phe Tyr Val Asp Gln Asn Val Ser Ile Lys Cys Arg		
515	520	525
Glu Gly Phe Leu Leu Gln Gly His Gly Ile Ile Thr Cys Asn Pro Asp		
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Glu Thr Trp Thr Gln Thr Ser Ala Lys Cys Glu Lys Ile Ser Cys Gly		
545	550	555
Pro Pro Ala His Val Glu Asn Ala Ile Ala Arg Gly Val His Tyr Gln		
565	570	575
Tyr Gly Asp Met Ile Thr Tyr Ser Cys Tyr Ser Gly Tyr Met Leu Glu		
580	585	590
Gly Phe Leu Arg Ser Val Cys Leu Glu Asn Gly Thr Trp Thr Ser Pro		
595	600	605
Pro Ile Cys Arg Ala Val Cys Arg Phe Pro Cys Gln Asn Gly Gly His		
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Leu Pro Thr Pro Lys Cys Leu Phe Leu Ser Arg Gly Leu Asp Gly Ala		
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Pro Leu		640

<210> 5773

<211> 579

<212> DNA

<213> Homo sapiens

<400> 5773

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300

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<210> 5774

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5774

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Ser	Ser	Lys	His	Asn	Lys	Lys	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg
		35					40					45			
Asp	Lys	Glu	Arg	Val	Arg	Lys	Arg	Ser	Lys	Ser	Arg	Glu	Ser	Lys	Arg
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Asn	Arg	Arg	Arg	Glu	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Thr	Asn	Thr	Ala
65					70					75					80
Val	Ser	Arg	Arg	Glu	Arg	Asp	Arg	Glu	Arg	Pro	Arg	Pro	Arg	Pro	Thr
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Ala	Ser	Thr	Ser	Ser	Gly	Ala	Arg								
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<210> 5775

<211> 1441

<212> DNA

<213> Homo sapiens

<400> 5775

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 120
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 480

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 1200
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 1441

<210> 5776

<211> 359

<212> PRT

<213> Homo sapiens

<400> 5776

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Leu	Gln	Asp	Val	Glu	Glu	Val	Glu	Ile	Gly	Arg	Asp	Thr	Phe	Trp	Pro
			20					25					30		
Asp	Ser	Glu	Pro	Lys	Pro	Glu	Gln	Ala	Pro	Arg	Ser	Pro	Gly	Ser	Gln
		35					40					45			
Ala	Pro	Asp	Glu	Gly	Ala	Gly	Gly	Ala	Leu	Arg	Thr	Ser	Val	Arg	Ser
		50				55				60					
Leu	Pro	Arg	Arg	Ala	Arg	Cys	Ser	Ala	Gly	Phe	Gly	Pro	Glu	Ser	Ser
65				70					75					80	
Ala	Glu	Arg	Pro	Ala	Gly	Gln	Pro	Pro	Gly	Ala	Val	Pro	Cys	Ala	Gln
			85					90					95		
Pro	Arg	Gly	Ala	Trp	Arg	Val	Thr	Leu	Val	Gln	Gln	Ala	Ala	Ala	Gly

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      100      105      110
Pro Glu Gly Ala Pro Glu Arg Ala Ala Glu Leu Gly Val Asn Phe Gly
      115      120      125
Arg Ser Arg Gln Gly Ser Ala Arg Gly Thr Lys Pro His Arg Cys Glu
      130      135      140
Ala Cys Gly Lys Ser Phe Lys Tyr Asn Ser Leu Leu Leu Lys His Gln
145      150      155      160
Arg Ile His Thr Gly Glu Lys Pro Tyr Ala Cys His Glu Cys Gly Lys
      165      170      175
Cys Phe Ala Ala Ser Arg Phe Ile Gln His Gln Arg Ile His Ser
      180      185      190
Gly Glu Lys Pro Tyr Ala Cys Pro Glu Cys Ser Lys Thr Phe Thr Arg
      195      200      205
Ser Ser Asn Leu Ile Lys His Gln Val Ile His Ser Gly Glu Arg Pro
      210      215      220
Phe Ala Cys Gly Asp Cys Gly Lys Leu Phe Arg Arg Ser Phe Ala Leu
225      230      235      240
Leu Glu His Ala Arg Val His Ser Gly Glu Lys Pro Tyr Glu Cys Ser
      245      250      255
Asp Cys Gly Lys Cys Phe Arg Gly Arg Ser His Phe Phe Arg His Asn
      260      265      270
Arg Thr His Thr Gly Glu Lys Pro Tyr His Cys Leu Asp Cys Gly Lys
      275      280      285
Ser Phe Ser His Ser Ser His Leu Ile Lys His Gln Arg Thr His Arg
      290      295      300
Gly Val Arg Pro Tyr Ala Cys Pro Leu Cys Gly Lys Ser Phe Ser Arg
305      310      315      320
Arg Ser Asn Leu His Arg His Glu Lys Ile His Thr Thr Gly Pro Lys
      325      330      335
Ala Leu Ala Met Leu Met Leu Gly Ala Ala Ala Gly Ala Leu Ala
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Thr Pro Pro Pro Ala Pro Thr
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<210> 5777

<211> 1431

<212> DNA

<213> Homo sapiens

<400> 5777

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120
tgcgtagcgc ctgcctcaag caaccaggta cgtaggtcgg cgcccagct cggcgctgcg
180
gtgggagccg gagggcgaca gtcagagccg gggtagccagc gggacgcgac cgccagatcc
240
acttaggacc ccgtcgttct gcgaagcggc cacgtctgag tccccggggc tcctcgtgct
300
gcagatgtcg ccttaggacc tcggccagga taccctctgc catgctcttg tgctgcccgt
360
gatcaccgac tggcccttgt aagcaccttc gcagcaggaa gcccagagct gcgcctgccc
420

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 660
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 840
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 1320
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<210> 5778

<211> 164

<212> PRT

<213> Homo sapiens

<400> 5778

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Gln	Ala	Lys	Met	Arg	Pro	Leu	Gln	Pro	Leu	Pro	Gln	Pro	Ser	Glu	Arg
			20				25				30				
Ala	Gly	Ala	Ala	Leu	Gly	Phe	Leu	Leu	Arg	Arg	Cys	Leu	Gln	Gly	Pro
		35				40					45				
Val	Gly	Asp	His	Gly	Gln	His	Lys	Ser	Met	Ala	Glu	Gly	Ile	Leu	Ala
	50				55					60					
Glu	Val	Leu	Arg	Arg	His	Leu	Gln	His	Glu	Glu	Ala	Pro	Gly	Leu	Arg
65				70					75				80		
Arg	Gly	Arg	Phe	Ala	Glu	Arg	Arg	Gly	Pro	Lys	Trp	Ile	Trp	Arg	Ser
			85				90				95				
Arg	Pro	Ala	Gly	Thr	Pro	Ala	Leu	Thr	Val	Ala	Leu	Arg	Leu	Pro	Pro

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          100          105          110
Gln Arg Arg Ala Gly Pro Pro Thr Tyr Val Pro Gly Cys Leu Arg Gln
          115          120          125
Ala Ala Arg Ser Pro Lys Leu Val Arg Ala Thr Trp Val Thr Ala Ala
          130          135          140
Val Pro Gly Arg Lys Arg Ser Leu Ala Pro Glu Gln Pro Ile Leu Gly
          145          150          155          160
Pro Ser Gln Val

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<210> 5779
 <211> 371
 <212> DNA
 <213> Homo sapiens

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120
gcacacggga atgtgtgcgg gtgtgtgtgc gtgcatgcag ctgtgtgtgg atgtgcantc
180
gtgtgtgggt gtgtaggtgt gtgtgggtgt gtgcaccagt gcagggtgtgc atgggtgtgt
240
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371

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<210> 5780
 <211> 123
 <212> PRT
 <213> Homo sapiens

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<400> 5780
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Gln Arg His Gly Arg Glu Arg Gly Val Ile Ser Ala Leu Ser Gly Ile
20     25     30
Pro Cys Val Cys Xaa Arg Val Cys Ala His Gly Asn Val Cys Gly Cys
35     40     45
Val Cys Val His Ala Ala Val Cys Gly Cys Ala Xaa Val Cys Gly Cys
50     55     60
Val Gly Val Cys Gly Cys Val His Gln Cys Arg Cys Ala Trp Val Cys
65     70     75     80
Thr Gly Gly Cys Val Tyr Val Cys Gly Gly Val Pro Ile Cys Ala Gly
85     90     95
Val Trp Val Cys Arg Val Xaa Cys Leu Cys Val Gly Val Xaa Pro Cys
100    105    110
Val Pro Leu Trp Arg Cys Val Gly Val Cys Ser
115    120

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<210> 5781
 <211> 845
 <212> DNA
 <213> Homo sapiens

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 120
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 180
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 240
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 420
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 480
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 600
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 720
 gaggtggag tggtgtctat accactgttc acctgtggga tgaataaaca gtggagaatg
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 ctctg
 845

<210> 5782
 <211> 147
 <212> PRT
 <213> Homo sapiens

<400> 5782
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 20 25 30
 Ala Pro Thr Leu Ala Asp Phe Lys Pro Pro Gly Glu Asp Gly Thr Ala
 35 40 45
 Thr Ser Ser Thr Glu Ala Pro Ala Ala Leu Ser Gly Thr Ser Gly Pro
 50 55 60
 Gly Xaa Ser Ser Pro Pro Gly Gly Pro Gly Leu Gly Pro Leu Pro Ala
 65 70 75 80
 Pro Glu Ala Leu Gln Pro Gly Val Gln Arg Gly Gly Pro Ala Gly His

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<400> 5783
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120
gctgggactc tccttcttag tacacaccga ctgatttga gagatcagaa aaatcatgag
180
tgttgcatgg ccattctcct ttcccaaatt gtgttcattg aagaacaggc ggctggaatt
240
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300
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480
gtaggatttg aaaggaaact ggaagaaaaa agaaaagaaa ctgacaaaaa cttttctgag
540
gcctttgaag acctcagcaa actaatgac aaggctaagg aatgggtgga attatcaaaa
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660
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720
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780
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960
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1020
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1140

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 1260
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<210> 5784

<211> 386

<212> PRT

<213> Homo sapiens

<400> 5784

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Leu	Val	Ile	Gln	Gln	Arg	Gly	Val	Arg	Ile	Tyr	Asp	Gly	Glu	Glu	Lys
			20					25					30		
Ile	Lys	Phe	Asp	Ala	Gly	Thr	Leu	Leu	Leu	Ser	Thr	His	Arg	Leu	Ile
		35				40					45				
Trp	Arg	Asp	Gln	Lys	Asn	His	Glu	Cys	Cys	Met	Ala	Ile	Leu	Leu	Ser
	50				55					60					
Gln	Ile	Val	Phe	Ile	Glu	Gln	Ala	Ala	Gly	Ile	Gly	Lys	Ser	Ala	
65				70				75					80		
Lys	Ile	Val	Val	His	Leu	His	Pro	Ala	Pro	Pro	Asn	Lys	Glu	Pro	Gly
			85				90					95			
Pro	Phe	Gln	Ser	Ser	Lys	Asn	Ser	Tyr	Ile	Lys	Leu	Ser	Phe	Lys	Glu
		100					105					110			
His	Gly	Gln	Ile	Glu	Phe	Tyr	Arg	Arg	Leu	Ser	Glu	Glu	Met	Thr	Gln
	115					120					125				
Arg	Arg	Trp	Glu	Asn	Met	Pro	Val	Ser	Gln	Ser	Leu	Gln	Thr	Asn	Arg
	130				135					140					
Gly	Pro	Gln	Pro	Gly	Arg	Ile	Arg	Ala	Val	Gly	Ile	Val	Gly	Ile	Glu
145				150				155					160		
Arg	Lys	Leu	Glu	Glu	Lys	Arg	Lys	Glu	Thr	Asp	Lys	Asn	Ile	Ser	Glu
		165				170						175			
Ala	Phe	Glu	Asp	Leu	Ser	Lys	Leu	Met	Ile	Lys	Ala	Lys	Glu	Met	Val

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<210> 5785
<211> 785.
<212> DNA
<213> Homo sapiens
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120
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180
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240
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480
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540
gggacttggg ggggtcccg cggcgattca cacgattgaa cacaagcctt ggccctgcac
600

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tcgacagggg ccaggggtccc agcgggtgcg cgagagctgc gcccgtggg gctgcaaggt
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 785

<210> 5786

<211> 159

<212> PRT

<213> Homo sapiens

<400> 5786

Met	Tyr	Thr	Ile	Ile	Asn	Gly	Pro	Ser	Lys	Leu	Val	Ala	Gln	Pro	His
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Arg	Ser	His	Ala	Ala	Ala	Gly	Glu	Gly	Pro	Ala	Pro	Gly	Ala	Pro	Glu
		20					25					30			
Lys	Pro	Ala	Ala	Arg	Ala	Ala	Asp	Leu	Ala	Ala	Pro	Ala	Gly	Ala	Ala
		35					40					45			
Leu	Ala	Gln	Pro	Leu	Gly	Pro	Trp	Pro	Leu	Ser	Ser	Ala	Gly	Pro	Arg
		50				55					60				
Leu	Val	Phe	Asn	Arg	Val	Asn	Arg	Arg	Arg	Asp	Pro	Ser	Lys	Ser	Pro
65					70					75					80
Ser	Leu	Gln	Gly	Thr	Gln	Glu	Thr	Tyr	Thr	Leu	Ala	His	Lys	Glu	Asn
				85					90					95	
Val	Arg	Phe	Val	Ser	Glu	Ala	Trp	Gln	Gln	Val	Gln	Gln	Gln	Leu	Asp
			100					105					110		
Gly	Gly	Pro	Ala	Gly	Glu	Gly	Gly	Pro	Arg	Pro	Val	Gln	Tyr	Val	Glu
		115					120					125			
Arg	Thr	Pro	Asn	Pro	Arg	Leu	Gln	Asn	Phe	Val	Pro	Ile	Asp	Leu	Asp
		130				135					140				
Glu	Trp	Trp	Ala	Gln	Gln	Phe	Leu	Ala	Arg	Ile	Thr	Ser	Cys	Ser	
145					150					155					

<210> 5787

<211> 1683

<212> DNA

<213> Homo sapiens

<400> 5787

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 240
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 300
 cagactagga tggctgtatc actaacagca gctgaaactc tggcccttca ggttacacag
 360

ggacaagaga agatgatgat gatgggacca aaggaagagg aacagtcttg tgagtatgag
 420
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 480
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<211> 200

<212> PRT

<213> Homo sapiens

<400> 5796

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

<400> 5801

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<211> 350

<212> PRT

<213> Homo sapiens

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<213> Homo sapiens

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<210> 5804

<211> 126

<212> PRT

<213> Homo sapiens

<400> 5804

Met	Ala	Pro	Gly	Glu	Val	Thr	Ile	Thr	Val	Arg	Leu	Ile	Arg	Ser	Phe
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Glu	His	Arg	Asn	Phe	Lys	Pro	Val	Val	Tyr	His	Gly	Val	Asn	Leu	Asp
			20					25					30		
Gln	Thr	Val	Lys	Glu	Phe	Ile	Val	Phe	Leu	Lys	Gln	Asp	Val	Pro	Leu
			35				40					45			
Arg	Thr	Asn	Leu	Pro	Pro	Pro	Phe	Arg	Asn	Tyr	Lys	Tyr	Asp	Ala	Leu
			50			55					60				
Lys	Ile	Ile	His	Gln	Ala	His	Lys	Ser	Lys	Thr	Asn	Glu	Leu	Val	Leu
65				70					75					80	
Ser	Leu	Glu	Asp	Asp	Glu	Arg	Leu	Leu	Leu	Lys	Glu	Asp	Ser	Thr	Leu
			85					90						95	
Lys	Ala	Ala	Gly	Ile	Ala	Ser	Glu	Thr	Glu	Ile	Ala	Phe	Phe	Cys	Glu
			100					105						110	
Glu	Asp	Tyr	Arg	Asn	Tyr	Lys	Ala	Asn	Pro	Ile	Ser	Ser	Trp		
			115				120						125		

<210> 5805

<211> 1112

<212> DNA

<213> Homo sapiens

<400> 5805

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 120

aaggccatcc ttgcgggggc tgaggccgat ctctccatg ggctgagtgc tcagtggaga
180
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240
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300
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420
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600
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1020
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1080
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1112

<210> 5806

<211> 105

<212> PRT

<213> Homo sapiens

<400> 5806

Met	Ser	Ile	Tyr	Phe	Pro	Ile	His	Cys	Pro	Asp	Tyr	Leu	Arg	Ser	Ala
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Lys	Met	Thr	Glu	Val	Met	Met	Asn	Thr	Gln	Pro	Met	Glu	Glu	Ile	Gly
			20					25					30		
Leu	Ser	Pro	Arg	Lys	Asp	Gly	Leu	Ser	Tyr	Gln	Ile	Phe	Pro	Asp	Pro
		35				40					45				
Ser	Asp	Phe	Asp	Arg	Cys	Cys	Lys	Leu	Lys	Asp	Arg	Leu	Pro	Ser	Ile
	50				55					60					
Val	Val	Glu	Pro	Thr	Glu	Gly	Glu	Val	Glu	Ser	Gly	Glu	Leu	Arg	Trp
65				70				75						80	
Pro	Pro	Glu	Glu	Phe	Leu	Val	Gln	Glu	Asp	Glu	Gln	Asp	Asn	Cys	Glu
			85				90						95		
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100

105

<210> 5807
<211> 1429
<212> DNA
<213> Homo sapiens

<400> 5807
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900
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960
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1380

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1429

<210> 5808

<211> 261

<212> PRT

<213> Homo sapiens

<400> 5808

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Ala	Phe	Gly	Thr	Gly	Val	Glu	Phe	Val	Arg	Phe	Thr	Ser	Leu	Arg	Pro
		20						25					30		
Leu	Leu	Gly	Gly	Ile	Pro	Glu	Ser	Gly	Gly	Pro	Asp	Ala	Arg	Gln	Gly
		35					40					45			
Trp	Leu	Ala	Ala	Leu	Gln	Asp	Arg	Ser	Ile	Leu	Ala	Pro	Leu	Ala	Trp
	50					55				60					
Asp	Leu	Gly	Leu	Leu	Leu	Phe	Val	Gly	Gln	His	Ser	Leu	Met	Ala	
65				70					75					80	
Ala	Glu	Arg	Val	Lys	Ala	Trp	Thr	Ser	Arg	Tyr	Phe	Gly	Val	Leu	Gln
			85					90					95		
Arg	Ser	Leu	Tyr	Val	Ala	Cys	Thr	Ala	Leu	Ala	Leu	Gln	Leu	Val	Met
		100						105					110		
Arg	Tyr	Trp	Glu	Pro	Ile	Pro	Lys	Gly	Pro	Val	Leu	Trp	Glu	Ala	Arg
	115					120							125		
Ala	Glu	Pro	Trp	Ala	Thr	Trp	Val	Pro	Leu	Leu	Cys	Phe	Val	Leu	His
	130					135					140				
Val	Ile	Ser	Trp	Leu	Leu	Ile	Phe	Ser	Ile	Leu	Leu	Val	Phe	Asp	Tyr
145				150						155				160	
Ala	Glu	Leu	Met	Gly	Leu	Lys	Gln	Val	Tyr	Tyr	His	Val	Leu	Gly	Leu
			165					170					175		
Gly	Glu	Pro	Leu	Ala	Leu	Lys	Ser	Pro	Arg	Ala	Leu	Arg	Leu	Phe	Ser
		180						185					190		
His	Leu	Arg	His	Pro	Val	Cys	Val	Glu	Leu	Leu	Thr	Val	Leu	Trp	Val
	195					200						205			
Val	Pro	Thr	Leu	Gly	Thr	Asp	Arg	Leu	Leu	Leu	Ala	Phe	Leu	Leu	Thr
	210					215					220				
Leu	Tyr	Leu	Gly	Leu	Ala	His	Gly	Leu	Asp	Gln	Gln	Asp	Leu	Arg	Tyr
225				230						235				240	
Leu	Arg	Ala	Gln	Leu	Gln	Arg	Lys	Leu	His	Leu	Leu	Ser	Arg	Pro	Gln
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<210> 5809

<211> 2009

<212> DNA

<213> Homo sapiens

<400> 5809

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120

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 2009

<210> 5810

<211> 52

<212> PRT

<213> Homo sapiens

<400> 5810

Xaa	Phe	Phe	Phe	Phe	Phe	Lys	Met	Glu	Ser	Arg	Ser	Ile	Thr	Gln	Ala
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Gly	Gly	Gln	Trp	Arg	Asp	Leu	Gly	Ser	Leu	Gln	Pro	Pro	Pro	Pro	Gly
		20					25					30			
Phe	Lys	Gln	Phe	Ser	Cys	Leu	Ser	Leu	Leu	Ser	Ser	Trp	His	Tyr	Lys
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His	Pro	Thr	Pro												
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<210> 5811

<211> 1607

<212> DNA

<213> Homo sapiens

<400> 5811

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<210> 5812

<211> 463

<212> PRT

<213> Homo sapiens

<400> 5812

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Glu	Arg	Ser	His	Ala	Val	Ile	Arg	Ser	Leu	Glu	Ala	Ala	Asp	Leu	Pro
		20					25					30			
Thr	Pro	Gln	Ala	Ile	Glu	Pro	Gln	Ala	Ile	Val	Gln	Gln	Val	Pro	Ala
		35				40				45					
Pro	Ser	Arg	Met	Gln	Met	Pro	Gln	Gly	Asn	Pro	Leu	Leu	Leu	Ser	His
	50			55				60							
Thr	Leu	Gln	Glu	Leu	Leu	Ala	Arg	Asp	Thr	Val	Gln	Val	Glu	Leu	Ile
65			70					75					80		
Pro	Glu	Lys	Lys	Gly	Leu	Phe	Leu	Lys	His	Val	Glu	Tyr	Glu	Val	Ser
		85				90				95					
Ser	Gln	Arg	Phe	Lys	Ser	Ser	Val	Tyr	Arg	Arg	Tyr	Asn	Asp	Phe	Val
		100				105					110				
Val	Phe	Gln	Glu	Met	Leu	Leu	His	Lys	Phe	Pro	Tyr	Arg	Met	Val	Pro

115	120	125
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130	135	140
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145	150	155
Pro Leu Phe Ser Glu Asp Val Val Leu Lys Leu Phe Leu Ser Phe Ser		
165	170	175
Gly Ser Asp Val Gln Asn Lys Leu Lys Glu Ser Ala Gln Cys Val Gly		
180	185	190
Asp Glu Phe Leu Asn Cys Lys Leu Ala Thr Arg Ala Lys Asp Phe Leu		
195	200	205
Pro Ala Asp Ile Gln Ala Gln Phe Ala Ile Ser Arg Glu Leu Ile Arg		
210	215	220
Asn Ile Tyr Asn Ser Phe His Lys Leu Arg Asp Arg Ala Glu Arg Ile		
225	230	235
Ala Ser Arg Ala Ile Asp Asn Ala Ala Asp Leu Leu Ile Phe Gly Lys		
245	250	255
Glu Leu Ser Ala Ile Gly Ser Asp Thr Thr Pro Leu Pro Ser Trp Ala		
260	265	270
Ala Leu Asn Ser Ser Thr Trp Gly Ser Leu Lys Gln Ala Leu Lys Gly		
275	280	285
Leu Ser Val Glu Phe Ala Leu Leu Ala Asp Lys Ala Ala Gln Gln Gly		
290	295	300
Lys Gln Glu Glu Asn Asp Val Val Glu Lys Leu Asn Leu Phe Leu Asp		
305	310	315
Leu Leu Gln Ser Tyr Lys Asp Leu Cys Glu Arg His Glu Lys Gly Val		
325	330	335
Leu His Lys His Gln Arg Ala Leu His Lys Tyr Ser Leu Met Lys Arg		
340	345	350
Gln Met Met Ser Ala Thr Ala Gln Asn Arg Glu Pro Glu Ser Val Glu		
355	360	365
Gln Leu Glu Ser Arg Ile Val Glu Gln Glu Asn Ala Ile Gln Thr Met		
370	375	380
Glu Leu Arg Asn Tyr Phe Ser Leu Tyr Cys Leu His Gln Glu Thr Gln		
385	390	395
Leu Ile His Val Tyr Leu Pro Leu Thr Ser His Ile Leu Arg Ala Phe		
405	410	415
Val Asn Ser Gln Ile Gln Gly His Lys Glu Met Ser Lys Val Trp Asn		
420	425	430
Asp Leu Arg Pro Lys Leu Ser Cys Leu Phe Ala Gly Pro His Ser Thr		
435	440	445
Leu Thr Pro Pro Cys Ser Pro Pro Glu Asp Gly Leu Cys Pro His		
450	455	460

<210> 5813

<211> 2991

<212> DNA

<213> Homo sapiens

<400> 5813

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180
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1740

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 1920
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 1980
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 2880
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<210> 5814

<211> 149

<212> PRT

<213> Homo sapiens

<400> 5814

Ala	Ser	Ser	Glu	Glu	Leu	Lys	Ala	Ala	Tyr	Arg	Arg	Leu	Cys	Met	Leu
1				5					10					15	
Tyr	His	Pro	Asp	Lys	His	Arg	Asp	Pro	Glu	Leu	Lys	Ser	Gln	Ala	Glu
			20					25					30		
Arg	Leu	Phe	Asn	Leu	Val	His	Gln	Ala	Tyr	Glu	Val	Leu	Ser	Asp	Pro

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      35      40      45
Gln Thr Arg Ala Ile Tyr Asp Ile Tyr Gly Lys Arg Gly Leu Glu Met
      50      55      60
Glu Gly Trp Glu Val Val Glu Arg Arg Arg Thr Pro Ala Glu Ile Arg
65      70      75      80
Glu Glu Phe Glu Arg Leu Gln Arg Glu Arg Glu Glu Arg Arg Leu Gln
      85      90      95
Gln Arg Thr Asn Pro Lys Leu Cys Asp Asn Lys Leu Cys Ser Ala Val
      100      105      110
Phe Ile Pro Trp Asn Pro Thr Arg Pro Asp His Cys Pro Ser Ser Glu
      115      120      125
Pro Arg Gln Glu His Arg Gly Leu Pro Ala Val Ala Met Gly Tyr Pro
      130      135      140
Val Ser His Glu His
145

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<210> 5815

<211> 590

<212> DNA

<213> Homo sapiens

<400> 5815

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120
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240
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gccctccagc ttcccaacaa gggacagcac ctctcctgtg gggtcatccc ggcggtccg
420
gtcaatgaga gaacggtcag cttggagcac aagattcgag ttgccttgt actcgtattg
480
cagactacgg gcggttacat ccgccatggc cgcggtgct cggaggcttc agaccaccac
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590

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<210> 5816

<211> 196

<212> PRT

<213> Homo sapiens

<400> 5816

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Phe Ile Gln Ala Ala Leu Gly Asp Gln Pro Arg Asp Ile Leu Cys Gly
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Ala Ala Asp Glu Val Leu Ala Val Leu Lys Asn Glu Lys Leu Arg Asp
20      25      30
Lys Glu Arg Arg Lys Glu Ile Asp Leu Leu Leu Gly Gln Thr Asp Asp

```

```

      35              40              45
Thr Arg Tyr His Val Leu Val Asn Leu Gly Leu Pro Ser Leu Phe Ser
      50              55              60
Phe Gly Leu Val Asp Asp Ala His His Leu Ile Asn Ala Leu Arg Gln
65      70      75      80
Gln Ser Ile Thr Leu His Leu Val Asp Val Met Pro Val Leu Ile Thr
      85      90      95
Leu Ser Ser Leu Gly Ser Ser Phe Leu Leu His Leu Arg Phe Gly Pro
      100      105      110
Leu Ser Leu Val Ser His Thr Gly Ala Leu Gln Leu Pro Asn Lys Gly
      115      120      125
Gln His Leu Ser Cys Gly Phe Ile Pro Ala Gly Pro Val Asn Glu Arg
      130      135      140
Thr Val Ser Leu Glu His Lys Ile Arg Val Arg Leu Val Leu Val Leu
145      150      155      160
Gln Thr Thr Gly Gly Tyr Ile Arg His Gly Arg Gly Cys Ser Glu Ala
      165      170      175
Ser Asp His His Ala Ser Ile Pro Gln Ala Ala Asn Gly Arg Arg Ser
      180      185      190
Leu Leu Leu Ala
      195

```

<210> 5817
 <211> 648
 <212> DNA
 <213> Homo sapiens

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<400> 5817
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120
cctagtaggc agtgcctctg ggacaagtct gagtcacccc agagaagcag catgaacaat
180
ggatccccca cagctctatc aggcagcaaa accaacagcc caaagaacag tggtcacaag
240
ctagatgtgt ctagaagccc ccctctcatg gtcaaaaaga acccagcctt taataagggt
300
agtgggatag ttaccaatgg gtccttcagc agcagtaatg cagaaggctt tgagaaaacc
360
caaaccaccc ccaatgggag cctacaggcc agaaggagct cttcactgaa ggtatctggt
420
accaaaatgg gcacgcacag tgtacagaat ggaacgggtgc gcatgggcat tttgaacagc
480
gacacactcg ggaacccccc aaatgttcga aacatgagct ggctgccaaa tggctatgtg
540
accctgaggg ataacaagca gaaagaacaa gctggagagt taggccagca caacagactg
600
tcacctatga taatgtccat cacagttctc catgatgaac ttgatgac
648

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<210> 5818
 <211> 191
 <212> PRT

<213> Homo sapiens

<400> 5818

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Met Gly Gln Leu Gln Asn Lys Glu Asn Asn Asn Thr Lys Asp Ser Pro
 1           5           10           15
Ser Arg Gln Cys Ser Trp Asp Lys Ser Glu Ser Pro Gln Arg Ser Ser
          20           25           30
Met Asn Asn Gly Ser Pro Thr Ala Leu Ser Gly Ser Lys Thr Asn Ser
      35           40           45
Pro Lys Asn Ser Val His Lys Leu Asp Val Ser Arg Ser Pro Pro Leu
      50           55           60
Met Val Lys Lys Asn Pro Ala Phe Asn Lys Gly Ser Gly Ile Val Thr
65           70           75           80
Asn Gly Ser Phe Ser Ser Ser Asn Ala Glu Gly Leu Glu Lys Thr Gln
          85           90           95
Thr Thr Pro Asn Gly Ser Leu Gln Ala Arg Arg Ser Ser Ser Leu Lys
          100          105          110
Val Ser Gly Thr Lys Met Gly Thr His Ser Val Gln Asn Gly Thr Val
          115          120          125
Arg Met Gly Ile Leu Asn Ser Asp Thr Leu Gly Asn Pro Thr Asn Val
          130          135          140
Arg Asn Met Ser Trp Leu Pro Asn Gly Tyr Val Thr Leu Arg Asp Asn
145          150          155          160
Lys Gln Lys Glu Gln Ala Gly Glu Leu Gly Gln His Asn Arg Leu Ser
          165          170          175
Pro Met Ile Met Ser Ile Thr Val Leu His Asp Glu Leu Asp Asp
          180          185          190

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<210> 5819

<211> 1652

<212> DNA

<213> Homo sapiens

<400> 5819

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120
cgctctgcct tgcagctctt ctggaccgag gagcccaaag ccctaccctc accattcacc
180
aggtcctgtg ggaagagcag cgtggaggtg ggctgaggtt agaaggtgca gagcgtggaa
240
gaagattgtg agctgagtat tggacatctg ttcttgaata gtccttgggc ctgccatagg
300
aaaggaagtt ctccagggtt acagttctta tccgcgtgaa tacacatggc tctgttacga
360
aaaattaatc aggtgctgct gttccttctg atcgtgaccc tctgtgtgat tctgtataag
420
aaagttcata aggggactgt gccaagaat gacgcagatg atgaatccga gactcctgaa
480
gaactggaag aagagattcc tgtggtgatt tgtgctgcag caggaggat gggtgccact
540
atggctgcca tcaatagcat ctacagcaac cctgacgcca acatcttggt ctatgtagtg
600

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ggactccgga atactctgac tcgaatacga aaatggattg aacattccaa actgagagaa
 660
 ataaacttta aaatcgtgga attcaaccgc atggctctca aagggaagat cagaccagac
 720
 tcatcgaggc ctgaattgct ccagcctctg aactttgttc gattttatct ccctctactt
 780
 atccaccaac acgagaaagt catctatttg gacgatgatg taattgtaca aggtgatatc
 840
 caagaactgt atgacaccac cttggccctg ggccacgcgg cggctttctc agatgactgc
 900
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 960
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 1020
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 1080
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 1140
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 1200
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 1260
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 1320
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 1440
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 1500
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 1620
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 1652

<210> 5820

<211> 274

<212> PRT

<213> Homo sapiens

<400> 5820

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 Val Thr Leu Cys Val Ile Leu Tyr Lys Lys Val His Lys Gly Thr Val
 20 25 30
 Pro Lys Asn Asp Ala Asp Asp Glu Ser Glu Thr Pro Glu Leu Glu
 35 40 45
 Glu Glu Ile Pro Val Val Ile Cys Ala Ala Ala Gly Arg Met Gly Ala
 50 55 60
 Thr Met Ala Ala Ile Asn Ser Ile Tyr Ser Asn Pro Asp Ala Asn Ile
 65 70 75 80
 Leu Phe Tyr Val Val Gly Leu Arg Asn Thr Leu Thr Arg Ile Arg Lys

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<210> 5821
<211> 3292
<212> DNA
<213> Homo sapiens
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4983

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780
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840
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1080
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<210> 5822

<211> 712

<212> PRT

<213> Homo sapiens

<400> 5822

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			20					25					30		
His	Lys	Glu	Arg	Cys	Ile	Ala	Ala	Ser	Leu	Glu	Leu	Asn	Asn	Pro	Val
		35				40					45				
Pro	Glu	Gln	Pro	Pro	Leu	Pro	Thr	Ser	Glu	Ser	Pro	Phe	Ala	Trp	Ser
	50				55					60					
Pro	Leu	Ala	Gly	Glu	Lys	Phe	Val	Glu	Val	Tyr	Lys	Glu	Ala	His	Leu
65				70				75						80	
Leu	Ala	Leu	His	Ile	Glu	Ser	Ser	Ser	Arg	Asn	Gln	Ala	Ala	Gln	Ala
			85					90						95	
Ala	Lys	Pro	Glu	Asp	Pro	Arg	Ser	Gln	Gly	Val	Glu	Arg	Phe	Ile	Gln

100 105 110
 Glu Ser Lys Leu Lys Ile Asn Leu Phe Glu Lys Glu Lys Glu Met Lys
 115 120 125
 Lys Ser Pro Thr Ser Leu Lys Arg Glu Thr Tyr Tyr Leu Ser Asp Ser
 130 135 140
 Pro Leu Leu Gly Pro Pro Val Gly Glu Pro Arg Leu Leu Ala Ser Ser
 145 150 155 160
 Pro Ala Leu Pro Ser Ser Gly Ala Gln Ala Arg Leu Thr Arg Ala Pro
 165 170 175
 Gly Pro Pro His Ser Ala His Ala Leu Pro Arg Glu Ser Cys Thr Ala
 180 185 190
 His Ala Ala Ser Gln Ala Ala Thr Gln Arg Lys Pro Gly Thr Lys Leu
 195 200 205
 Leu Leu Pro Arg Ala Ala Ser Val Arg Gly Arg Ser Ile Pro Gly Ala
 210 215 220
 Ala Glu Lys Pro Lys Lys Glu Ile Pro Ala Ser Pro Ser Arg Thr Lys
 225 230 235 240
 Ile Pro Ala Glu Lys Glu Ser His Arg Asp Val Leu Pro Asp Lys Pro
 245 250 255
 Ala Pro Gly Ala Val Asn Val Pro Ala Ala Gly Ser His Leu Gly Gln
 260 265 270
 Gly Lys Arg Ala Ile Pro Val Pro Asn Lys Leu Gly Leu Lys Lys Thr
 275 280 285
 Leu Leu Lys Ala Pro Gly Ser Thr Ser Asn Leu Ala Arg Lys Ser Ser
 290 295 300
 Ser Gly Pro Val Trp Ser Gly Ala Ser Ser Ala Cys Thr Ser Pro Ala
 305 310 315 320
 Val Gly Lys Ala Lys Ser Ser Glu Phe Ala Ser Ile Pro Ala Asn Ser
 325 330 335
 Ser Arg Pro Leu Ser Asn Ile Ser Lys Ser Gly Arg Met Gly Pro Ala
 340 345 350
 Met Leu Arg Pro Ala Leu Pro Ala Gly Pro Val Gly Ala Ser Ser Trp
 355 360 365
 Gln Ala Lys Arg Val Asp Val Ser Glu Leu Ala Ala Glu Gln Leu Thr
 370 375 380
 Ala Pro Pro Ser Ala Ser Pro Thr Gln Pro Gln Thr Pro Glu Gly Gly
 385 390 395 400
 Gly Gln Trp Leu Asn Ser Ser Cys Ala Trp Ser Glu Ser Ser Gln Leu
 405 410 415
 Asn Lys Thr Arg Ser Ile Arg Arg Arg Asp Ser Cys Leu Asn Ser Lys
 420 425 430
 Thr Lys Val Met Pro Thr Pro Thr Asn Gln Phe Lys Ile Pro Lys Phe
 435 440 445
 Ser Ile Gly Asp Ser Pro Asp Ser Ser Thr Pro Lys Leu Ser Arg Ala
 450 455 460
 Gln Arg Pro Gln Ser Cys Thr Ser Val Gly Arg Val Thr Val His Ser
 465 470 475 480
 Thr Pro Val Arg Arg Ser Ser Gly Pro Ala Pro Gln Ser Leu Leu Ser
 485 490 495
 Ala Trp Arg Val Ser Ala Leu Pro Thr Pro Ala Ser Arg Arg Cys Ser
 500 505 510
 Gly Leu Pro Pro Met Thr Pro Lys Thr Met Pro Arg Ala Val Gly Ser
 515 520 525
 Pro Leu Cys Val Pro Ala Arg Arg Arg Ser Ser Glu Pro Arg Lys Asn

530 535 540
 Ser Ala Met Arg Thr Glu Pro Thr Arg Glu Ser Asn Arg Lys Thr Asp
 545 550 555 560
 Ser Arg Leu Val Asp Val Ser Pro Asp Arg Gly Ser Pro Pro Ser Arg
 565 570 575
 Val Pro Gln Ala Leu Asn Phe Ser Pro Glu Glu Ser Asp Ser Thr Phe
 580 585 590
 Ser Lys Ser Thr Ala Thr Glu Val Ala Arg Glu Glu Ala Lys Pro Gly
 595 600 605
 Gly Asp Ala Ala Pro Ser Glu Ala Leu Leu Val Asp Ile Lys Leu Glu
 610 615 620
 Pro Leu Ala Val Thr Pro Asp Ala Ala Ser Gln Pro Leu Ile Asp Leu
 625 630 635 640
 Pro Leu Ile Asp Phe Cys Asp Thr Pro Glu Ala His Val Ala Val Gly
 645 650 655
 Ser Glu Ser Arg Pro Leu Ile Asp Leu Met Thr Asn Thr Pro Asp Met
 660 665 670
 Asn Lys Asn Val Ala Lys Pro Ser Pro Val Val Gly Gln Leu Ile Asp
 675 680 685
 Leu Ser Ser Pro Leu Ile Gln Leu Ser Pro Glu Ala Asp Lys Glu Asn
 690 695 700
 Val Asp Ser Pro Leu Leu Lys Phe
 705 710

<210> 5823

<211> 2585

<212> DNA

<213> Homo sapiens

<400> 5823

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 180
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 720

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<213> Homo sapiens

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Val	Cys	Val	Cys	Val	Cys	Val	Cys	Phe	Cys	Val	Cys	Leu	Met	Leu	Cys
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<213> Homo sapiens

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 35 40 45
 Trp Glu Arg Pro Leu Phe Ile Lys Leu Gly Phe Phe Leu Ile Ser Leu
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 Pro Asn Val Val Ser Gln Tyr Ser Ser Tyr Ser Ser Leu Gln Gly Val
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<211> 1479

<212> PRT

<213> Homo sapiens

<400> 5830

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His Gly Leu Gln Gly Cys Leu Glu Ala Gln Gly Gly Gln Val Arg Val
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Thr Pro Ala Cys Asn Thr Ser Leu Pro Ala Gln Arg Trp Lys Trp Val
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Ser Arg Asn Arg Leu Phe Asn Leu Gly Thr Met Gln Cys Leu Gly Thr
85 90 95
Gly Trp Pro Gly Thr Asn Thr Thr Ala Ser Leu Gly Met Tyr Glu Cys
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Asp Arg Glu Ala Leu Asn Leu Arg Trp His Cys Arg Thr Leu Gly Asp
115 120 125
Gln Leu Ser Leu Leu Leu Gly Ala Arg Thr Ser Asn Ile Ser Lys Pro
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Gly Thr Leu Glu Arg Gly Asp Gln Thr Arg Ser Gly Gln Trp Arg Ile
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Tyr Gly Ser Glu Glu Asp Leu Cys Ala Leu Pro Tyr His Glu Val Tyr
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Thr Ile Gln Gly Asn Ser His Gly Lys Pro Cys Thr Ile Pro Phe Lys
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Tyr Asp Asn Gln Trp Phe His Gly Cys Thr Ser Thr Gly Arg Glu Asp
195 200 205
Gly His Leu Trp Cys Ala Thr Thr Gln Asp Tyr Gly Lys Asp Glu Arg
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Trp Gly Phe Cys Pro Ile Lys Ser Asn Asp Cys Glu Thr Phe Trp Asp
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625              630              635              640
Arg Tyr Ile Cys Arg Gln Ser Leu Gly Thr Pro Val Thr Pro Glu Leu
      645              650              655
Pro Gly Pro Asp Pro Thr Pro Ser Leu Thr Gly Ser Cys Pro Gln Gly
      660              665              670
Trp Ala Ser Asp Thr Lys Leu Arg Tyr Cys Tyr Lys Val Phe Ser Ser
      675              680              685
Glu Arg Leu Gln Asp Lys Lys Ser Trp Val Gln Ala Gln Gly Ala Cys
      690              695              700
Gln Glu Leu Gly Ala Gln Leu Leu Ser Leu Ala Ser Tyr Glu Glu Glu
705              710              715              720
His Phe Val Ala Asn Met Leu Asn Lys Ile Phe Gly Glu Ser Glu Pro
      725              730              735
Glu Ile His Glu Gln His Trp Phe Trp Ile Gly Leu Asn Arg Arg Asp
      740              745              750
Pro Arg Gly Gly Gln Ser Trp Arg Trp Ser Asp Gly Val Gly Phe Ser
      755              760              765
Tyr His Asn Phe Asp Arg Ser Arg His Asp Asp Asp Ile Arg Gly
      770              775              780
Cys Ala Val Leu Asp Leu Ala Ser Leu Gln Trp Val Ala Met Gln Cys

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785 790 795 800
 Asp Thr Gln Leu Asp Trp Ile Cys Lys Ile Pro Arg Gly Thr Asp Val
 805 810 815
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 820 825 830
 Gln Glu Ala Glu Tyr Lys Phe Phe Glu His His Ser Thr Trp Ala Gln
 835 840 845
 Ala Gln Arg Ile Cys Thr Trp Phe Gln Ala Glu Leu Thr Ser Val His
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 Ser Gln Ala Glu Leu Asp Phe Leu Ser His Asn Leu Gln Lys Phe Ser
 865 870 875 880
 Arg Ala Gln Glu Gln His Trp Trp Ile Gly Leu His Thr Ser Glu Ser
 885 890 895
 Asp Gly Arg Phe Arg Trp Thr Asp Gly Ser Ile Ile Asn Phe Ile Ser
 900 905 910
 Trp Ala Pro Gly Lys Pro Arg Pro Val Gly Lys Asp Lys Lys Cys Val
 915 920 925
 Tyr Met Thr Ala Ser Arg Glu Asp Trp Gly Asp Gln Arg Cys Leu Thr
 930 935 940
 Ala Leu Pro Tyr Ile Cys Lys Arg Ser Asn Val Thr Lys Glu Thr Gln
 945 950 955 960
 Pro Pro Asp Leu Pro Thr Thr Ala Leu Gly Gly Cys Pro Ser Asp Trp
 965 970 975
 Ile Gln Phe Leu Asn Lys Cys Phe Gln Val Gln Gly Gln Glu Pro Gln
 980 985 990
 Ser Arg Val Lys Trp Ser Glu Ala Gln Phe Ser Cys Glu Gln Gln Glu
 995 1000 1005
 Ala Gln Leu Val Thr Ile Thr Asn Pro Leu Glu Gln Ala Phe Ile Thr
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 Ala Ser Leu Pro Asn Val Thr Phe Asp Leu Trp Ile Gly Leu His Ala
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 Ser Gln Arg Asp Phe Gln Trp Val Glu Gln Glu Pro Leu Met Tyr Ala
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 1075 1080 1085
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 1090 1095 1100
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 Ala Leu Pro Pro Ala Pro Gly Thr Glu Leu Ser Tyr Leu Asn Gly Thr
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 Phe Arg Leu Leu Gln Lys Pro Leu Arg Trp His Asp Ala Leu Leu Leu
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 Cys Glu Ser His Asn Ala Ser Leu Ala Tyr Val Pro Asp Pro Tyr Thr
 1155 1160 1165
 Gln Ala Phe Leu Thr Gln Ala Ala Arg Gly Leu Arg Thr Pro Leu Trp
 1170 1175 1180
 Ile Gly Leu Ala Gly Glu Glu Gly Ser Arg Arg Tyr Ser Trp Val Ser
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 Glu Glu Pro Leu Asn Tyr Val Gly Trp Gln Asp Gly Glu Pro Gln Gln
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 Pro Gly Gly Cys Thr Tyr Val Asp Val Asp Gly Ala Trp Arg Thr Thr

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 Ser Cys Asp Thr Lys Leu Gln Gly Ala Val Cys Gly Val Ser Ser Gly
 1235 1240 1245
 Pro Pro Pro Pro Arg Arg Ile Ser Tyr His Gly Ser Cys Pro Gln Gly
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 Leu Ala Asp Ser Ala Trp Ile Pro Phe Arg Glu His Cys Tyr Ser Phe
 1265 1270 1275 1280
 His Met Glu Leu Leu Leu Gly His Lys Glu Ala Arg Gln Arg Cys Gln
 1285 1290 1295
 Arg Ala Gly Gly Ala Val Leu Ser Ile Leu Asp Glu Met Glu Asn Val
 1300 1305 1310
 Phe Val Trp Glu His Leu Gln Ser Tyr Glu Gly Gln Ser Arg Gly Ala
 1315 1320 1325
 Trp Leu Gly Met Asn Phe Asn Pro Lys Gly Gly Thr Leu Val Trp Gln
 1330 1335 1340
 Asp Asn Thr Ala Val Asn Tyr Ser Asn Trp Gly Pro Pro Gly Leu Gly
 1345 1350 1355 1360
 Pro Ser Met Leu Ser His Asn Ser Cys Tyr Trp Ile Gln Ser Asn Ser
 1365 1370 1375
 Gly Leu Trp Arg Pro Gly Ala Cys Thr Asn Ile Thr Met Gly Val Val
 1380 1385 1390
 Cys Lys Leu Pro Arg Ala Glu Gln Ser Ser Phe Ser Pro Ser Ala Leu
 1395 1400 1405
 Pro Glu Asn Pro Ala Ala Leu Val Val Val Leu Met Ala Val Leu Leu
 1410 1415 1420
 Leu Leu Ala Leu Leu Thr Ala Ala Leu Ile Leu Tyr Arg Arg Arg Gln
 1425 1430 1435 1440
 Ser Ile Glu Arg Gly Ala Phe Glu Gly Ala Arg Tyr Ser Arg Ser Ser
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 Glu Met Asn Glu Gln Gln Glu
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<210> 5831
 <211> 2216
 <212> DNA
 <213> Homo sapiens

<400> 5831
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 actcttaagt tctcagcact atgttatgca cttgacgggc attactttaa tcttcactg
 180
 tgagatactt gttattgcct cattttgtag acgagaaaac gggcatagag ggtgagacat
 240
 tggcccaggt tcattccgta agggttggag cctggaattc agatacagga ggaagttaac
 300
 atccctaata ggaggggttct gggtactggg gccactgggc ttcttggcag agctgtacac
 360
 aaagaatttc agcagaataa ttggcatgca gttggctgtg gtttcagaag agcaagacca
 420

aaatttgaac aggttaatat gttggattct aatgcagttc atcacatcat tcatgatttt
480
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540
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600
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660
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720
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1980
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2040

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<210> 5832

<211> 322

<212> PRT

<213> Homo sapiens

<400> 5832

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 His Lys Glu Phe Gln Gln Asn Asn Trp His Ala Val Gly Cys Gly Phe
 35 40 45
 Arg Arg Ala Arg Pro Lys Phe Glu Gln Val Asn Leu Leu Asp Ser Asn
 50 55 60
 Ala Val His His Ile Ile His Asp Phe Gln Pro His Val Ile Val His
 65 70 75 80
 Cys Ala Ala Glu Arg Arg Pro Asp Val Val Glu Asn Gln Pro Asp Ala
 85 90 95
 Ala Ser Gln Leu Asn Val Asp Ala Ser Gly Asn Leu Ala Lys Glu Ala
 100 105 110
 Ala Ala Val Gly Ala Phe Leu Ile Tyr Ile Ser Ser Asp Tyr Val Phe
 115 120 125
 Asp Gly Thr Asn Pro Pro Tyr Arg Glu Glu Asp Ile Pro Ala Pro Leu
 130 135 140
 Asn Leu Tyr Gly Lys Thr Lys Leu Asp Gly Glu Lys Ala Val Leu Glu
 145 150 155 160
 Asn Asn Leu Gly Ala Ala Val Leu Arg Ile Pro Ile Leu Tyr Gly Glu
 165 170 175
 Val Glu Lys Leu Glu Glu Ser Ala Val Thr Val Met Phe Asp Lys Val
 180 185 190
 Gln Phe Ser Asn Lys Ser Ala Asn Met Asp His Trp Gln Gln Arg Phe
 195 200 205
 Pro Thr His Val Lys Asp Val Ala Thr Val Cys Arg Gln Leu Ala Glu
 210 215 220
 Lys Arg Met Leu Asp Pro Ser Ile Lys Gly Thr Phe His Trp Ser Gly
 225 230 235 240
 Asn Glu Gln Met Thr Lys Tyr Glu Met Ala Cys Ala Ile Ala Asp Ala
 245 250 255
 Phe Asn Leu Pro Ser Ser His Leu Arg Pro Ile Thr Asp Ser Pro Val
 260 265 270
 Leu Gly Ala Gln Arg Pro Arg Asn Ala Gln Leu Asp Cys Ser Lys Leu
 275 280 285
 Glu Thr Leu Gly Ile Gly Gln Arg Thr Pro Phe Arg Ile Gly Ile Lys
 290 295 300
 Glu Ser Leu Trp Pro Phe Leu Ile Asp Lys Arg Trp Arg Gln Thr Val
 305 310 315 320
 Phe His

<210> 5833

<211> 805

<212> DNA

<213> Homo sapiens

<400> 5833

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 180
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 240
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 300
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 360
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 420
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 480
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 540
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 660
 gatgacttaa aagaaagggt tgcaaagatt catatcagtg tatctgaacc tattattcca
 720
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 780
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 805

<210> 5834

<211> 268

<212> PRT

<213> Homo sapiens

<400> 5834

Lys	Leu	Ala	Ala	Gln	Gly	Gln	Ala	Pro	Leu	Glu	Pro	Thr	Gln	Asp
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Gly	Ser	Ala	Ile	Glu	Thr	Cys	Pro	Lys	Gly	Asp	Glu	Pro	Arg	Gly
		20					25				30			
Glu	Gln	Gln	Val	Glu	Ser	Met	Thr	Pro	Lys	Pro	Val	Leu	Gln	Glu
	35					40					45			
Asn	Asn	Gln	Glu	Ser	Phe	Ile	Ala	Phe	Ala	Arg	Val	Phe	Ser	Gly
	50				55				60					
Ala	Arg	Arg	Gly	Lys	Lys	Ile	Phe	Val	Leu	Gly	Pro	Lys	Tyr	Ser
65				70					75				80	
Leu	Glu	Phe	Leu	Arg	Arg	Val	Pro	Leu	Gly	Phe	Ser	Ala	Pro	Pro

<400> 5836
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Ala Leu Arg Phe Phe Lys Glu Lys Asp Gly Lys Ala Phe His Pro Thr

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Tyr Glu Glu Lys Leu Lys Leu Val Ala Leu His Lys Gln Val Leu Met
          35          40          45
Gly Pro Tyr Asn Pro Asp Thr Cys Pro Glu Val Gly Phe Phe Asp Val
          50          55          60
Leu Gly Asn Asp Arg Arg Arg Glu Trp Ala Ala Leu Gly Asn Met Ser
65          70          75          80
Lys Glu Asp Ala Met Val Glu Phe Val Lys Leu Leu Asn Arg Cys Cys
          85          90          95
His Leu Phe Ser Thr Tyr Val Ala Ser His Lys Ile Glu Lys Glu Glu
          100          105          110
Gln Asp Lys Lys Arg Lys Glu Glu Glu Arg Arg Arg Arg Glu Glu
          115          120          125
Glu Glu Arg Glu Arg Leu Gln Lys Glu Glu Glu Lys
          130          135          140

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<210> 5837
 <211> 582
 <212> DNA
 <213> Homo sapiens

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<400> 5837
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120
tgggccaagg gggacatcca gggggcaggg gccgcctccc gccgtgcctt cctgctgggg
180
gtcctcgccg tcgggctggg cgtgtgcacg tatgcggctg ccttggtgac cctggccgcc
240
taccttgccct ccgagaccc gccctagttg cccctacagc cctcactgtg aaccctgagg
300
ccggcagccc agcaaactcg tgggcagaga gtggagaatc ttggtggatg aggctgcggc
360
ggcggcagga gcatctagaa acgggagcga gctggactgg aacccttccc ctctctggcc
420
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480
cgaggaaggg gctgcagttc tccaaggatt cccgcctgct ccagatccc cgggagtcgt
540
aggaaccctg tcctggacgc tgacgtcggc ttccagggat cc
582

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<210> 5838
 <211> 88
 <212> PRT
 <213> Homo sapiens

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<400> 5838
Xaa Arg Leu Ser Pro Phe Leu Pro His Asp His Leu Gly Leu Ala Val
1          5          10          15
Phe Ser Met Leu Cys Cys Phe Trp Pro Val Gly Ile Ala Ala Phe Cys
          20          25          30
Leu Ala Gln Lys Thr Asn Lys Ala Trp Ala Lys Gly Asp Ile Gln Gly

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	35		40		45	
Ala	Gly	Ala	Ala	Ser	Arg	Arg
	50		55		60	
Gly	Leu	Gly	Val	Cys	Thr	Tyr
65			70		75	
Tyr	Leu	Ala	Ser	Arg	Asp	Pro
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<210> 5839

<211> 1895

<212> DNA

<213> Homo sapiens

<400> 5839

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120
cattcgaatg catccaacc agtgctcagc tgcgtaacga catggagaga ggcagggggg
180
aatagaaagc aaatttaaaa acaccaacac ccaaacacac aagactgcac acaagaaaaa
240
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300
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360
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gccttttctt ctaagttttc ctccttttct ttgcacaggt gtcaggtagc accccagggg
660
tgaggagct ggtgttttca tgacaaacaa aaatggggag gttgactcta tctcaaaact
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1080
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1140
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1200

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 1320
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 1380
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<210> 5840

<211> 138

<212> PRT

<213> Homo sapiens

<400> 5840

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			20					25					30		
Leu	Met	Val	His	Gly	Trp	Cys	Pro	Val	Ile	Phe	Ser	Trp	Ala	Val	Ala
		35					40					45			
Pro	Arg	Gly	Ser	Gly	Phe	Pro	Ala	Gln	Gly	Ile	Phe	Asp	Pro	Cys	Gln
	50					55					60				
Arg	Arg	Glu	Arg	Glu	Leu	Ser	Trp	Phe	Pro	Phe	His	Leu	Phe	Ser	Gly
65					70				75					80	
Cys	Phe	Lys	Ala	Asn	Ile	Pro	Val	Pro	Asn	Val	Leu	Cys	Gly	Leu	Asn
			85					90					95		
Pro	Gly	Arg	Gly	Gln	Gly	His	Ile	Gln	Val	Gly	Leu	Ala	Ser	Ser	Thr
			100					105					110		
Thr	Phe	Trp	Pro	Gln	Gln	Arg	Met	Gly	Phe	His	Gln	Ser	Leu	Ser	Thr
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Ser	Arg	Phe	Pro	Lys	Glu	Ser	Pro	Arg	Ser						
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<210> 5841

<211> 3411

<212> DNA

<213> Homo sapiens

<400> 5841

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300
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360
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660
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780
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<212> DNA

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<210> 5846

<211> 257

<212> PRT

<213> Homo sapiens

<400> 5846

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Gln	Gln	Glu	Lys	Glu	Trp	Leu	Leu	Ala	Glu	Glu	Thr	Ala	Ala	Thr	Ala
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Thr	Ser	Gly	Lys	Tyr	Gln	Asp	Val	Tyr	Val	Glu	Leu	Ser	His	Ile	Lys

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<210> 5847

<211> 1021

<212> DNA

<213> Homo sapiens

<400> 5847

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<210> 5848

<211> 120

<212> PRT

<213> Homo sapiens

<400> 5848

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 35 40 45
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 50 55 60
 Val Arg Ser Leu Leu Ser Pro Gly Leu Leu Pro His Leu Leu Pro Ala
 65 70 75 80
 Leu Gly Phe Lys Asn Lys Thr Val Leu Lys Lys Arg Cys Lys Asp Cys
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<210> 5849

<211> 3174

<212> DNA

<213> Homo sapiens

<400> 5849

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<210> 5850

<211> 154

<212> PRT

<213> Homo sapiens

<400> 5850

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Cys	Thr	Gln	Thr	Gly	His	Ala	Gln	Pro	Cys	Pro	Ser	Ala	Pro	Ser	Thr
		35					40						45		
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Ser	Ala	Ser	Asn	Pro	Gln	Pro	Pro	Gly	Ser	Pro	His	Cys	Pro	Ser	Ala
		65				70				75				80	
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Val	Pro	Arg	Val	Arg	Arg	Pro	Gly	Leu	Ala	Gly	His	Pro	Val	Thr	His
			100					105					110		
Arg	Ile	Asn	Arg	Lys	Thr	Ala	Ser	Pro	Pro	Asn	Leu	Cys	Pro	Arg	His
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Asn	Met	Ser	Arg	Ser	Glu	Ser	Cys	Thr	Pro	Arg	Ser	Arg	Ala	Pro	Leu
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<210> 5851

<211> 488

<212> DNA

<213> Homo sapiens

<400> 5851

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<210> 5852

<211> 82

<212> PRT

<213> Homo sapiens

<400> 5852

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			20					25					30		
Leu	Thr	Lys	Gly	Thr	Ser	Ala	Ala	His	Leu	Asn	Ser	Met	Glu	Val	Thr
		35				40					45				
Thr	Glu	Asp	Thr	Ser	Arg	Thr	Asp	Ala	Tyr	Glu	Ser	Tyr	Lys	Lys	Lys
	50					55				60					
Asp	Tyr	Thr	Gln	Val	Asp	Tyr	Leu	Ile	Asn	Gly	Met	Tyr	Ala	Asp	Ser
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<210> 5853

<211> 487

<212> DNA

<213> Homo sapiens

<400> 5853

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<210> 5854

<211> 68

<212> PRT

<213> Homo sapiens

<400> 5854

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Tyr	Arg	Arg	Ser	Gln	Glu	Gly	Gly	Pro	Ala	Arg	Pro	Ala	Ala	Pro	Asp
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Thr	Pro	Ser	Gly	Arg	Ser	Gly	Pro	Ala	Ala	Pro	Trp	Arg	Thr	Pro	Ala
		35				40				45					
Arg	Thr	Pro	Pro	Arg	Leu	Leu	Pro	Thr	Leu	Cys	Pro	Val	Thr	Pro	Val
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<210> 5855

<211> 362

<212> DNA

<213> Homo sapiens

<400> 5855

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<210> 5856

<211> 113

<212> PRT

<213> Homo sapiens

<400> 5856

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      20           25           30
Ser Pro Pro Asp Pro Pro Ala Gly Thr Cys Trp Gly Leu Trp Gly Pro
      35           40           45
Lys Arg Glu Gly Val Asn Glu Val Val Ala Glu Val Leu Leu Ala Ala
      50           55           60
His Glu Gly Val Gly Asp Gln Gly Glu Ala Gly Ala His Pro Val Leu
65           70           75           80
Ser Asp Ala Gly Leu Leu Val Leu Gly Leu Arg Ala Ala Leu Gly Glu
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<210> 5857

<211> 1751

<212> DNA

<213> Homo sapiens

<400> 5857

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<210> 5858

<211> 434

<212> PRT

<213> Homo sapiens

<400> 5858

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		20						25					30		
Gly	Gly	Gln	Gly	Arg	Gly	Gly	Glu	Lys	Pro	Pro	His	Leu	Ala	Ala	Leu
		35					40					45			
Ile	Leu	Ala	Arg	Gly	Gly	Ser	Lys	Gly	Ile	Pro	Leu	Lys	Asn	Ile	Lys
	50					55					60				
His	Leu	Ala	Gly	Val	Pro	Leu	Ile	Gly	Trp	Val	Leu	Arg	Ala	Ala	Leu
65					70				75					80	
Asp	Ser	Gly	Ala	Phe	Gln	Ser	Val	Trp	Val	Ser	Thr	Asp	His	Asp	Glu
			85					90						95	
Ile	Glu	Asn	Val	Ala	Lys	Gln	Phe	Gly	Ala	Gln	Val	His	Arg	Arg	Ser
		100						105					110		
Ser	Glu	Val	Ser	Lys	Asp	Ser	Ser	Thr	Ser	Leu	Asp	Ala	Ile	Ile	Glu

115 120 125
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 Thr Ser Pro Cys Leu His Pro Thr Asp Leu Gln Lys Val Ala Glu Met
 145 150 155 160
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 Gln Phe Arg Trp Ser Glu Ile Gln Lys Gly Val Arg Glu Val Thr Glu
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 195 200 205
 Gly Glu Leu Tyr Glu Asn Gly Ser Phe Tyr Phe Ala Lys Arg His Leu
 210 215 220
 Ile Glu Met Gly Tyr Leu Gln Gly Gly Lys Met Ala Tyr Tyr Glu Met
 225 230 235 240
 Arg Ala Glu His Ser Val Asp Ile Asp Val Asp Ile Asp Trp Pro Ile
 245 250 255
 Ala Glu Gln Arg Val Leu Arg Tyr Gly Tyr Phe Gly Lys Glu Lys Leu
 260 265 270
 Lys Glu Ile Lys Leu Leu Val Cys Asn Ile Asp Gly Cys Leu Thr Asn
 275 280 285
 Gly His Ile Tyr Val Ser Gly Asp Gln Lys Glu Ile Ile Ser Tyr Asp
 290 295 300
 Val Lys Asp Ala Ile Gly Ile Ser Leu Leu Lys Lys Ser Gly Ile Glu
 305 310 315 320
 Val Arg Leu Ile Ser Glu Arg Ala Cys Ser Lys Gln Thr Leu Ser Ser
 325 330 335
 Leu Lys Leu Asp Cys Lys Met Glu Val Ser Val Ser Asp Lys Leu Ala
 340 345 350
 Val Val Asp Glu Trp Arg Lys Glu Met Gly Leu Cys Trp Lys Glu Val
 355 360 365
 Ala Tyr Leu Gly Asn Glu Val Ser Asp Glu Glu Cys Leu Lys Arg Val
 370 375 380
 Gly Leu Ser Gly Ala Pro Ala Asp Ala Cys Ser Thr Ala Gln Lys Ala
 385 390 395 400
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<210> 5859

<211> 2267

<212> DNA

<213> Homo sapiens

<400> 5859

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<210> 5860

<211> 96

<212> PRT

<213> Homo sapiens

<400> 5860

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Pro	Ala	Ala	Ala	Arg	Gln	Ser	Pro	Ala	Arg	Leu	His	Pro	Lys	Ser	Arg
				20				25					30		
Ser	Arg	Ala	Ser	Glu	Ala	Ser	Gly	Ser	Leu	Leu	Leu	Arg	Phe	Phe	Leu
			35				40					45			
Gln	Met	Gly	Leu	Gly	Arg	Cys	Arg	Phe	Cys	Phe	Ser	Pro	Trp	Leu	Pro
	50					55					60				
Val	Arg	Pro	Gln	Pro	Ser	Gly	Cys	Asp	Ile	Ile	Glu	Ser	Ala	Val	Ser
65					70				75					80	
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<210> 5861

<211> 1951

<212> DNA

<213> Homo sapiens

<400> 5861

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 360

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<210> 5862
 <211> 514
 <212> PRT
 <213> Homo sapiens

<400> 5862

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      20           25           30
Pro Asp Leu Lys Val Ile Tyr Ile Leu Val Arg Pro Lys Ala Gly Gln
      35           40           45
Thr Leu Gln Gln Arg Val Phe Gln Ile Leu Asp Ser Lys Leu Phe Glu
      50           55           60
Lys Val Lys Glu Val Cys Pro Asn Val His Glu Lys Ile Arg Ala Ile
65           70           75           80
Tyr Ala Asp Leu Asn Gln Asn Asp Phe Ala Ile Ser Lys Glu Asp Met
      85           90           95
Gln Glu Leu Leu Ser Cys Thr Asn Ile Ile Phe His Cys Ala Ala Thr
      100          105          110
Val Arg Phe Asp Asp Thr Leu Arg His Ala Val Gln Leu Asn Val Thr
      115          120          125
Ala Thr Arg Gln Leu Leu Leu Met Ala Ser Gln Met Pro Lys Leu Glu
      130          135          140
Ala Phe Ile His Ile Ser Thr Ala Tyr Ser Asn Cys Asn Leu Lys His
145          150          155          160
Ile Asp Glu Val Ile Tyr Pro Cys Pro Val Glu Pro Lys Lys Lys Ile
      165          170          175
Ile Asp Ser Leu Glu Trp Leu Asp Asp Ala Ile Ile Asp Glu Ile Thr
      180          185          190
Pro Lys Leu Ile Arg Asp Trp Pro Asn Ile Tyr Thr Tyr Thr Lys Ala
      195          200          205
Leu Gly Glu Met Val Val Gln Gln Glu Ser Arg Asn Leu Asn Ile Ala
      210          215          220
Ile Ile Arg Pro Ser Ile Val Gly Ala Thr Trp Gln Glu Pro Phe Pro
225          230          235          240
Gly Trp Val Asp Asn Ile Asn Gly Pro Asn Gly Ile Ile Ile Ala Thr
      245          250          255
Gly Lys Gly Phe Leu Arg Ala Ile Lys Ala Thr Pro Met Ala Val Ala
      260          265          270
Asp Val Ile Pro Val Asp Thr Val Val Asn Leu Met Leu Ala Val Gly
      275          280          285
Trp Tyr Thr Ala Val His Arg Pro Lys Ser Thr Leu Val Tyr His Ile
      290          295          300
Thr Ser Gly Asn Met Asn Pro Cys Asn Trp His Lys Met Gly Val Gln
305          310          315          320
Val Leu Ala Thr Phe Glu Lys Ile Pro Phe Glu Arg Pro Phe Arg Arg
      325          330          335
Pro Asn Ala Asn Phe Thr Ser Asn Ser Phe Thr Ser Gln Tyr Trp Asn
      340          345          350
Ala Val Ser His Arg Ala Pro Ala Ile Ile Tyr Asp Cys Tyr Leu Arg
      355          360          365
Leu Thr Gly Arg Lys Pro Arg Met Thr Lys Leu Met Asn Arg Leu Leu

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      370      375      380
Arg Thr Val Ser Met Leu Glu Tyr Phe Ile Asn Arg Ser Trp Glu Trp
385      390      395      400
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      405      410      415
Gln Arg Val Phe Asn Phe Asp Val Arg Gln Leu Asn Trp Leu Glu Tyr
      420      425      430
Ile Glu Asn Tyr Val Leu Gly Val Lys Lys Tyr Leu Leu Lys Glu Asp
      435      440      445
Met Ala Gly Ile Pro Lys Ala Lys Gln Arg Leu Lys Arg Leu Arg Asn
      450      455      460
Ile His Tyr Leu Phe Asn Thr Ala Leu Phe Leu Ile Ala Trp Arg Leu
465      470      475      480
Leu Ile Ala Arg Ser Gln Met Ala Arg Asn Val Trp Phe Phe Ile Val
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Ser Phe Cys Tyr Lys Phe Leu Ser Tyr Phe Arg Ala Ser Ser Thr Leu
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Lys Val

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<210> 5863
 <211> 438
 <212> DNA
 <213> Homo sapiens

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300
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438

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<210> 5864
 <211> 104
 <212> PRT
 <213> Homo sapiens

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<400> 5864
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Asp Cys Ser Leu Pro Val Gly Gln Thr His Ser Asn Thr Lys Leu Phe
20      25      30
Cys Gln Tyr Leu Ser Tyr Val Pro Phe Met Ala Glu Tyr Gln Ser Lys

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	35					40						45							
Gln	Pro	Leu	Glu	Gln	Gly	Arg	Thr	Ser	Val	Phe	Thr	Leu	Gly	Ser	Pro				
	50					55					60								
Gly	Tyr	Gln	Asn	Pro	Ala	Pro	Phe	Ser	Ile	Asn	Gln	Ser	Gln	Thr	Val				
65					70				75						80				
Asn	Val	Lys	Thr	Gly	Thr	Ser	Cys	Leu	Glu	Thr	Gln	Ile	Leu	Phe	Gln				
			85					90					95						
Glu	Glu	Tyr	Leu	Arg	Ile	Phe	Leu												
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<210> 5865

<211> 1229

<212> DNA

<213> Homo sapiens

<400> 5865

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1140

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<210> 5866
 <211> 212
 <212> PRT
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<400> 5866
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 35 40 45
 Phe Val Leu Pro Thr Glu Gln Phe His Leu Gly Lys Ile Glu Glu Leu
 50 55 60
 Leu Val Glu Arg Thr Gly Ala Pro Phe Cys Ser Pro Thr Ser Ser Gly
 65 70 75 80
 Trp Arg Arg Ser Arg Ala Ser Ala Ile Ala Ala Gly Val His Pro Gln
 85 90 95
 Asp Ala Met Arg Ser Val Thr Lys Gln Ala Ile Arg Glu Ala Arg Leu
 100 105 110
 Lys Glu Ile Lys Glu Glu Leu Leu His Ser Glu Lys Leu Lys Thr Tyr
 115 120 125
 Phe Glu Asp Asn Pro Arg Asp Leu Gln Leu Leu Arg His Asp Leu Pro
 130 135 140
 Leu His Pro Ala Val Val Lys Pro His Leu Gly His Val Pro Asp Tyr
 145 150 155 160
 Leu Val Pro Pro Ala Leu Arg Gly Leu Val Arg Pro His Lys Lys Arg
 165 170 175
 Lys Lys Leu Ser Ser Ser Cys Arg Lys Ala Lys Arg Ala Lys Ser Gln
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 Ala Lys Pro Ser
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<210> 5867
 <211> 1882
 <212> DNA
 <213> Homo sapiens

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<211> 2217

<212> DNA

<213> Homo sapiens

<400> 5871

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<212> PRT

<213> Homo sapiens

<400> 5872

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<211> 3463

<212> DNA

<213> Homo sapiens

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<400> 5874

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<211> 1648

<212> PRT

<213> Homo sapiens

<400> 5876

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Asp	Asp	Ser	Lys	Asn	Ala	Gln	Ala	Pro	Leu	Ala	Leu	Thr	Glu	Ser
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Phe	Cys	Phe	Ser	His	Ile	Ser	Ser	Glu	Ser	Ile	Ala	Gln	Ser	Ile
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Ser	Glu	Val	Asn	Pro	Leu	Trp	Thr	Ala	Leu	Leu	Phe	Leu	Leu	Cys
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<212> DNA

<213> Homo sapiens

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Arg	Leu	Arg	Gly	Cys	Arg	Asn	Leu	Tyr	Lys	Lys	Asp	Leu	Leu	Gly	His	50	55	60	
Phe	Gly	Cys	Val	Asn	Ala	Ile	Glu	Phe	Ser	Asn	Asn	Gly	Gly	Gln	Trp	65	70	75	80
Leu	Val	Ser	Gly	Gly	Asp	Asp	Arg	Arg	Val	Leu	Leu	Trp	His	Met	Glu	85	90	95	
Gln	Ala	Ile	His	Ser	Arg	Val	Lys	Pro	Ile	Gln	Leu	Lys	Gly	Glu	His	100	105	110	
His	Ser	Asn	Ile	Phe	Cys	Leu	Ala	Phe	Asn	Ser	Gly	Asn	Thr	Lys	Val	115	120	125	
Phe	Ser	Gly	Gly	Asn	Asp	Glu	Gln	Val	Ile	Leu	His	Asp	Val	Glu	Ser	130	135	140	
Ser	Glu	Thr	Leu	Asp	Val	Phe	Ala	His	Glu	Asp	Ala	Val	Tyr	Gly	Leu	145	150	155	160
Ser	Val	Ser	Pro	Val	Asn	Asp	Asn	Ile	Phe	Ala	Ser	Ser	Ser	Asp	Asp	165	170	175	
Gly	Arg	Val	Leu	Ile	Trp	Asp	Ile	Arg	Glu	Ser	Pro	His	Gly	Glu	Pro	180	185	190	
Phe	Cys	Trp	Ala	Asn	Tyr	Pro	Ser	Ala	Phe	His	Ser	Val	Met	Phe	Asn	195	200	205	
Pro	Val	Glu	Pro	Arg	Leu	Leu	Ala	Pro	Ala	Asn	Ser	Lys	Glu	Gly	Val	210	215	220	
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<210> 5879

<211> 1555

<212> DNA

<213> Homo sapiens

<400> 5879

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1555

<210> 5880
 <211> 185
 <212> PRT
 <213> Homo sapiens

<400> 5880
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 35 40 45
 Phe Tyr Asp Val Glu Ala Leu Arg Asp Tyr Leu Leu Gln Arg Glu Met
 50 55 60
 Tyr Lys Val His Glu Lys Asn Arg Ser Tyr Thr Trp Leu Glu Lys Gln
 65 70 75 80
 His Gly Pro Tyr Gly Ala Gly Ala Phe Phe Ile Leu Lys Gln Gly Gly
 85 90 95
 Ala Val Lys Phe Arg Asp Lys Glu Trp Ile Arg Pro Asp Lys Tyr Gly
 100 105 110
 His Phe Ser Gln Glu Phe Trp Asn Phe Cys Glu Val Pro Val Glu Ala
 115 120 125
 Val Asp Ala Gly Asp Cys Asp Ile Asn Tyr Glu Gly Leu Asp Asn Leu
 130 135 140
 Arg Thr Ser Ala Gly Trp Thr Ser Arg Thr Ser Leu Pro Cys Pro Thr
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 Leu Trp Glu Ser Thr Gly Leu Arg Ala
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<210> 5881
 <211> 327
 <212> DNA
 <213> Homo sapiens

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<210> 5882
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<213> Homo sapiens

<400> 5882

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Ala Lys Glu Asn Met Val Thr Phe Ser His Thr Leu Pro Arg Ala Ser
          35          40          45
Ala Pro Ser Leu Asp Asp Pro Ala Arg Arg His Met Thr Ile His Val
          50          55          60
Pro Leu Asp Ala Ser Arg Ser Lys Gln Leu Ile Ser Glu Trp Lys Gln
65          70          75          80
Lys Ser Leu Glu Gly Arg Gly Leu Gly Leu Pro Asp Asp Ala Ser Pro
          85          90          95
Gly His Leu Arg Ala Pro Ala Glu Pro Met Pro Glu Xaa
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<210> 5883

<211> 579

<212> DNA

<213> Homo sapiens

<400> 5883

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120
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180
cagatttgtc gcctctgtcc ccgaagacac ctgcaccctc catgcgaggc caagatgggg
240
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<210> 5884

<211> 71

<212> PRT

<213> Homo sapiens

<400> 5884

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	35		40		45										
Phe	Ser	Thr	Arg	Thr	Val	Met	Leu	Gly	Thr	Ala	Ala	Val	Lys	Ala	Gln
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<210> 5885

<211> 1905

<212> DNA

<213> Homo sapiens

<400> 5885

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120
acgtagacgg tagacagttc gcgtgcgttt ccttcgccta cttggcctac atgccttctg
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<210> 5886

<211> 265

<212> PRT

<213> Homo sapiens

<400> 5886

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 Gly Ala Gly Pro Leu Tyr Ser His Leu Pro Thr Ser Pro Leu Gln
 35 40 45
 Lys Ala Leu Leu Ala Ala Gly Ser Ala Ala Met Ala Leu Tyr Asn Pro
 50 55 60
 Tyr Arg His Asp Met Val Ala Val Leu Gly Glu Thr Thr Gly His Arg
 65 70 75 80
 Thr Leu Lys Val Leu Arg Asp Gln Met Arg Arg Asp Pro Glu Gly Ala
 85 90 95
 Gln Ile Leu Gln Glu Arg Pro Arg Ile Ser Thr Ser Thr Leu Asp Leu
 100 105 110
 Gly Lys Leu Gln Ser Leu Pro Glu Gly Ser Leu Gly Arg Glu Tyr Leu
 115 120 125
 Arg Phe Leu Asp Val Asn Arg Val Ser Pro Asp Thr Arg Ala Pro Thr
 130 135 140
 Arg Phe Val Asp Asp Glu Leu Ala Tyr Val Ile Gln Arg Tyr Arg
 145 150 155 160
 Glu Val His Asp Met Leu His Thr Leu Leu Gly Met Pro Thr Asn Ile
 165 170 175
 Leu Gly Glu Ile Val Val Lys Trp Phe Glu Ala Val Gln Thr Gly Leu

	180		185		190
Pro Met Cys Ile Leu Gly Ala Phe Phe Gly Pro Ile Arg Leu Gly Ala					
195		200		205	
Gln Ser Leu Gln Val Leu Val Ser Glu Leu Ile Pro Trp Ala Val Gln					
210		215		220	
Asn Gly Arg Arg Ala Pro Cys Val Leu Asn Leu Tyr Tyr Glu Arg Arg					
225		230		235	240
Trp Glu Gln Ser Leu Arg Ala Leu Arg Glu Glu Leu Gly Ile Thr Ala					
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<210> 5887

<211> 3779

<212> DNA

<213> Homo sapiens

<400> 5887

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<210> 5888

<211> 166

<212> PRT

<213> Homo sapiens

<400> 5888

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			20					25					30		
Pro	Glu	Tyr	Met	Trp	Phe	Leu	Leu	Tyr	Cys	Glu	Gly	Thr	Arg	Phe	Thr
		35					40					45			
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Pro	Val	Leu	Lys	Tyr	His	Leu	Leu	Pro	Arg	Thr	Lys	Gly	Phe	Thr	Thr
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1080

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<211> 118

<212> PRT

<213> Homo sapiens

<400> 5890

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<210> 5892

<211> 212

<212> PRT

<213> Homo sapiens

<400> 5892

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Phe	Arg	Asn	Gly	Ala	Val	Tyr	Gly	Ala	Lys	Ile	Arg	Ala	Pro	His	Ala
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Trp	Ala	Ile	Leu	Gln	Ala	Thr	Tyr	Ile	His	Ser	Trp	Asn	Leu	Ala	Arg
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Phe	Val	Phe	Thr	Tyr	Lys	Gly	Leu	Arg	Ala	Leu	Gln	Ser	Tyr	Ile	Gln
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Gly	Lys	Thr	Tyr	Pro	Ala	His	Ala	Phe	Leu	Ala	Ala	Phe	Leu	Gly	Gly
			100					105					110		
Ile	Leu	Val	Phe	Gly	Glu	Asn	Asn	Asn	Ile	Asn	Ser	Gln	Ile	Asn	Met
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Tyr	Leu	Leu	Ser	Arg	Val	Leu	Phe	Ala	Leu	Ser	Arg	Leu	Ala	Val	Glu
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Lys	Gly	Tyr	Ile	Pro	Glu	Pro	Arg	Trp	Asp	Pro	Phe	Pro	Leu	Leu	Thr
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			165					170						175	
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Ser	Asn	Val	Trp	His	Asp	Ile	Ser	Asp	Phe	Leu	Val	Tyr	Asn	Lys	Ser
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<211> 1389

<212> DNA

<213> Homo sapiens

<400> 5893

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<210> 5894

<211> 260

<212> PRT

<213> Homo sapiens

<400> 5894

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      35           40           45
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Tyr Cys Ser Thr Arg Ile Tyr Ala Ser Met Lys Cys Pro Asp Gln Lys
      65           70           75           80
Cys Leu Tyr Thr Cys Gln Ile Lys Asp Gly Gly Val Gln Pro Gln Phe
      85           90           95
Glu Ile Val Pro Glu Asp Asp Pro Gln Asn Ala Ile Val Ser Ser Ser
      100          105          110
Ala Asp Ala Cys His Ala Glu Leu Arg Thr Ile Ser Thr Thr Met
      115          120          125
Gly Lys Leu Met Pro Asn Leu Leu Pro Ala Gly Ala Asp Phe Phe Gly
      130          135          140
Phe Ser His Pro Ala Ile His Asn Leu Ile Gln Ser Cys Pro Gly Ala
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Arg Lys Cys Ile Asn Tyr Gln Trp Val Lys Phe Asp Val Cys Lys Pro
      165          170          175
Gly Asp Gly Gln Leu Pro Glu Gly Leu Pro Glu Asn Asp Ala Ala Met
      180          185          190
Ser Phe Glu Ala Phe Gln Arg Gln Ile Phe Asp Glu Asp Gln Asn Asp
      195          200          205
Pro Leu Leu Pro Gly Ser Leu Asp Leu Pro Glu Leu Gln Pro Ala Ala
      210          215          220
Phe Val Ser Ser Tyr Gln Pro Met Tyr Leu Thr His Glu Pro Leu Val
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<210> 5895

<211> 2748

<212> DNA

<213> Homo sapiens

<400> 5895

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<210> 5896

<211> 261

<212> PRT

<213> Homo sapiens

<400> 5896

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Arg	Asp	Leu	Gly	Gly	Ser	Ser	Ala	Ala	Thr	Glu	Ala	Val	Ala	Ile	Leu
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		50				55					60				
Ile	Arg	Ala	Val	Tyr	Pro	Ala	Phe	Asp	Lys	Asn	Asn	Pro	Ser	Asn	Lys
65					70					75				80	
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				85					90					95	
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			100					105					110		
Trp	Thr	Pro	Asn	Val	Ser	Glu	Lys	Ile	Leu	Ile	Asp	Ile	Ile	Gly	Val
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Phe	Phe	Pro	Val	Pro	Val	Thr	Val	Arg	Ala	His	Leu	Thr	Gly	Trp	Leu
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Glu Ser Thr Met Val Ala Ile Ala Ala Cys Tyr Val Tyr Arg Lys Gln					
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Lys Lys Lys Met Glu Asn Glu Ser Ala Thr Glu Gly Glu Asp Ser Ala					
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<210> 5897

<211> 1930

<212> DNA

<213> Homo sapiens

<400> 5897

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1080

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<210> 5898

<211> 242

<212> PRT

<213> Homo sapiens

<400> 5898

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			20					25					30		
Glu	Ile	Cys	Ala	Asp	Glu	Phe	Pro	Gly	Ser	Ser	Ala	Thr	Tyr	Arg	Ile
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Leu	Glu	Val	Gly	Cys	Gly	Val	Gly	Asn	Thr	Val	Phe	Pro	Ile	Leu	Gln
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Thr	Asn	Asn	Asp	Pro	Gly	Leu	Phe	Val	Tyr	Cys	Cys	Asp	Phe	Ser	Ser
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Thr	Ala	Ile	Glu	Leu	Val	Gln	Thr	Asn	Ser	Glu	Tyr	Asp	Pro	Ser	Arg
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Cys	Phe	Ala	Phe	Val	His	Asp	Leu	Cys	Asp	Glu	Glu	Lys	Ser	Tyr	Pro
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Phe Tyr Val Arg Gly Asp Gly Thr Arg Val Tyr Phe Phe Thr Gln Glu		175
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Glu Leu Asp Thr Leu Phe Thr Thr Ala Gly Leu Glu Lys Val Gln Asn		190
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Leu Val Asp Arg Arg Leu Gln Val Asn Arg Gly Lys Gln Leu Thr Met		205
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<211> 1589

<212> DNA

<213> Homo sapiens

<400> 5899

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<211> 345

<212> PRT

<213> Homo sapiens

<400> 5900

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225	230	235
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<211> 984

<212> DNA

<213> Homo sapiens

<400> 5901

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<212> PRT

<213> Homo sapiens

<400> 5902

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Thr	Trp	Asn	Arg	Arg	Trp	Phe	Ser	Ile	Gln	Asn	Ser	Gln	Leu	Val	Tyr
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<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 5904

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<212> DNA

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Leu Phe Lys Val Leu Ser Val Gly Arg Gly Gly Ser Pro Arg Leu Gln
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Pro Asp Ser Arg Ala Leu His Tyr Met Lys Lys Leu Tyr Lys Thr Tyr
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Ala Thr Lys Glu Gly Ile Pro Lys Ser Asn Arg Ser His Leu Tyr Asn
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Asp Arg Ile Thr Thr Val Glu His Leu Leu Lys Ser Val Leu Leu Tyr
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Ala Ser Asn Lys Arg Ser Ile His Met Ser Ile Asn Phe Thr Cys Met
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Lys Asp Gln Leu Glu His Pro Ser Ala Gln Asn Gly Leu Phe Asn Met
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 Trp Gly Arg Thr Tyr Ser Phe Thr Ser Ala Met Ser Arg Gly Cys Val
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<211> 981

<212> PRT

<213> Homo sapiens

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 Arg Thr Met Leu Phe Thr Ile Gly Gln Ser Glu Val Tyr Leu Ile Ser
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<213> Homo sapiens

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<211> 1252

<212> PRT

<213> Homo sapiens

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<400> 5923

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<213> Homo sapiens

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<210> 5926

<211> 526

<212> PRT

<213> Homo sapiens

<400> 5926

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<210> 5927
<211> 1786
<212> DNA
<213> Homo sapiens
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<210> 5928

<211> 202

<212> PRT

<213> Homo sapiens

<400> 5928

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35	40	45	
Phe Leu Met Glu Asn Arg Val Gln Ser Phe Tyr Gln Gln Glu Leu Glu			
50	55	60	
Met Val Glu Ser Leu Leu Ser Leu Ala Asn Gln Pro Val Ile His Ser			
65	70	75	80
Ala Cys Ser Asp Gln Val Asn Phe Lys Lys Asp Thr Thr Ser Lys Ala			
85	90	95	
Ile His Ser Ile Phe Lys Asn Ala Ile Gln Leu Leu Gln Glu Lys Gly			
100	105	110	
Leu Val Phe Gln Lys Asp Asp Gly Phe Asp Asn Leu Tyr Tyr Val Thr			
115	120	125	
Arg Glu Asp Lys Asp Leu His Arg Lys Ile His Arg Ile Ile Gln Gln			
130	135	140	
Asp Cys Gln Lys Pro Asn His Met Glu Lys Gly Cys His Phe Leu His			
145	150	155	160
Ile Leu Ala Cys Ala Arg Leu Ser Ile Arg Pro Gly Leu Ser Glu Ala			
165	170	175	
Val Leu Gln Gln Val Leu Glu Leu Leu Glu Asp Gln Ser Asp Ile Val			
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Ser Thr Met Glu His Tyr Tyr Thr Ala Phe			
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<210> 5929

<211> 606

<212> DNA

<213> Homo sapiens

<400> 5929

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 <211> 144
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Leu Gln Pro Ala Gly Ser Val Ser Ser Thr Pro Leu Ser Thr Pro Cys
 50 55 60
 Ser Ser Val Pro Ser Ser Pro Ser Phe Ser Pro Thr Glu Gln Lys Thr
 65 70 75 80
 His Leu Glu Asp Leu Tyr Trp Met Ala Ser Asn Tyr Gln Gln Met Asn
 85 90 95
 Pro Glu Ala Leu Asn Leu Thr Pro Glu Asp Ala Val Glu Ala Leu Ile
 100 105 110
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<210> 5931
 <211> 478
 <212> DNA
 <213> Homo sapiens

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<210> 5932
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 5932

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 35 40 45
 Ala Gly Ser Ser Gly Pro Gly Asn Ser Gln Asn Ser Phe Leu Val Gln
 50 55 60
 Glu Val Met Glu Glu Glu Trp Asn Ala Leu Gln Ser Val Glu Asn Cys
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<210> 5933

<211> 1953

<212> DNA

<213> Homo sapiens

<400> 5933

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<210> 5934

<211> 314

<212> PRT

<213> Homo sapiens

<400> 5934

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 35 40 45
 Ser Leu Phe Glu Glu Ala His Lys Met Val Arg Glu Ala Asn Met Lys
 50 55 60
 Gln Ala Ala Ser Glu Lys Gln Leu Lys Glu Ala Arg Gly Lys Ile Asp
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<210> 5935
<211> 2727
<212> DNA
<213> Homo sapiens
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<210> 5936
 <211> 154
 <212> PRT
 <213> Homo sapiens

<400> 5936
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 Tyr His Pro Thr Pro Ser Gln Thr Arg Leu Ala Thr Gln Leu Thr Glu
 50 55 60
 Glu Glu Gln Ile Arg Ile Ala Gln Arg Ile Gly Leu Ile Gln His Leu
 65 70 75 80
 Pro Lys Gly Val Tyr Asp Pro Gly Arg Asp Gly Ser Glu Lys Lys Ile
 85 90 95
 Arg Glu Cys Val Ile Cys Met Met Asp Phe Val Tyr Gly Asp Pro Ile
 100 105 110
 Arg Phe Leu Pro Cys Met His Ile Tyr His Leu Asp Cys Ile Asp Asp
 115 120 125
 Trp Leu Met Arg Ser Phe Thr Cys Pro Ser Cys Met Glu Pro Val Asp
 130 135 140
 Ala Ala Leu Leu Ser Ser Tyr Glu Thr Asn
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<210> 5937
 <211> 1536
 <212> DNA
 <213> Homo sapiens

<400> 5937
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<210> 5938

<211> 406

<212> PRT

<213> Homo sapiens

<400> 5938

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      20           25           30
Gly Lys Ser Leu Ile Val Pro Phe Lys Gly Ser Arg Val Ile Asp Ser
      35           40           45
Thr Val Leu Pro Gly Ile Leu Ile Glu Met Ser Glu Val Gln Leu Met
      50           55           60
Arg Leu Leu Pro Ile Lys Lys Ser Thr Ala Leu Lys Val Ala Leu Phe
65           70           75           80
Cys Thr Thr Leu Ser Gly Asp Thr Ser Asp Thr Gly Glu Gly Thr Val
      85           90           95
Val Val Ser Tyr Gly Val Ser Leu Glu Asn Ala Val Leu Asp Gln Leu
      100          105          110
Leu Asn Leu Gly Arg Gln Leu Ile Ser Asp His Val Asp Leu Val Leu
      115          120          125
Cys Gln Lys Val Ile His Pro Ser Leu Lys Gln Phe Leu Asn Met His
      130          135          140
Arg Ile Ile Ala Ile Asp Arg Ile Gly Val Thr Leu Met Glu Pro Leu
145          150          155          160
Thr Lys Met Thr Gly Thr Gln Pro Ile Gly Ser Leu Gly Ser Ile Cys
      165          170          175
Pro Asn Ser Tyr Gly Ser Val Lys Asp Val Cys Thr Ala Lys Phe Gly
      180          185          190
Ser Lys His Phe Phe His Leu Ile Pro Asn Glu Ala Thr Ile Cys Ser
      195          200          205
Leu Leu Leu Cys Asn Arg Asn Asp Thr Ala Trp Asp Glu Leu Lys Leu
      210          215          220
Thr Cys Gln Thr Ala Leu His Val Leu Gln Leu Thr Leu Lys Glu Pro
225          230          235          240
Trp Ala Leu Leu Gly Gly Gly Cys Thr Glu Thr His Leu Ala Ala Tyr
      245          250          255
Ile Arg His Lys Thr His Asn Asp Pro Glu Ser Ile Leu Lys Asp Asp
      260          265          270
Glu Cys Thr Gln Thr Glu Leu Gln Leu Ile Ala Glu Ala Phe Cys Ser
      275          280          285
Ala Leu Glu Ser Val Val Gly Ser Leu Glu His Asp Gly Gly Glu Ile
      290          295          300
Leu Thr Asp Met Lys Tyr Gly His Leu Trp Ser Val Gln Ala Asp Ser
305          310          315          320
Pro Cys Val Ala Asn Trp Pro Asp Leu Leu Ser Gln Cys Gly Cys Gly
      325          330          335
Leu Tyr Asn Ser Gln Glu Glu Leu Asn Trp Ser Phe Leu Arg Ser Thr
      340          345          350
Arg Arg Pro Phe Val Pro Gln Ser Cys Leu Pro His Glu Ala Val Gly
      355          360          365
Ser Ala Ser Asn Leu Thr Leu Asp Cys Leu Thr Ala Lys Leu Ser Gly
      370          375          380
Leu Gln Val Ala Val Glu Thr Ala Asn Leu Ile Leu Asp Leu Ser Tyr
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Val Ile Glu Asp Lys Asn

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405

<210> 5939

<211> 795

<212> DNA

<213> Homo sapiens

<400> 5939

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<210> 5940

<211> 96

<212> PRT

<213> Homo sapiens

<400> 5940

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Cys Lys Arg Lys Glu Gln Glu Gln Lys Glu Arg Ala Leu Gln Pro
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Lys Lys Gln Arg Leu Val Phe Thr Asp Leu Gln Arg Arg Thr Leu Ile
20          25          30
Ala Ile Phe Lys Glu Asn Lys Arg Pro Ser Lys Glu Met Gln Val Thr
35          40          45
Ile Ser Gln Gln Leu Gly Leu Glu Leu Asn Thr Val Ser Asn Phe Phe
50          55          60
Met Asn Ala Arg Arg Arg Cys Met Asn Arg Trp Ala Glu Glu Pro Ser
65          70          75          80
Thr Ala Pro Gly Gly Pro Ala Gly Ala Thr Ala Thr Phe Ser Lys Ala

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85

90

95

<210> 5941

<211> 2590

<212> DNA

<213> Homo sapiens

<400> 5941

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<210> 5942

<211> 89

<212> PRT

<213> Homo sapiens

<400> 5942

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Arg	Gln	Ser	Leu	Ala	Leu	Leu	Xaa	Gln	Val	Gly	Val	Gln	Trp	His	Asp
			20					25				30			
Pro	Gly	Ser	Leu	Gln	Pro	Pro	Pro	Pro	Gly	Phe	Lys	Gln	Phe	Ser	Cys

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          35          40          45
Leu Ser Leu Pro Ser Ser Trp Asp Tyr Arg Cys Leu Ser Ser Arg Leu
   50          55          60
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65          70          75          80
Gly Trp Ser Gln Thr Pro Asp Leu Lys
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<210> 5943
 <211> 781
 <212> DNA
 <213> Homo sapiens

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<400> 5943
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120
ggacaacttg ttgtaattgg taaggatgaa tcttatagca agacttctgg ggtttccagc
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660
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<210> 5944
 <211> 174
 <212> PRT
 <213> Homo sapiens

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<400> 5944
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          20          25          30
Gly Val Ser Ser Ile Thr Lys Leu Gln Arg Gln Pro Phe Gly Val Glu

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      35          40          45
Thr Lys Pro Gly Ile Leu Cys Cys Phe Gln Asn Glu Phe Glu Asn Pro
  50          55          60
Cys Phe Pro Lys Ser His Phe Ser Val Thr Gln Ala Gly Glu Gln Trp
  65          70          75          80
Arg Asp Leu Ser Ser Pro Gln Pro Pro Pro Arg Phe Lys Gln Phe
      85          90          95
Ser Cys Leu Ser Leu Pro Ser Ser Trp Asp His Arg His Pro Pro Pro
      100          105          110
Arg Pro Ala Asn Phe Cys Ile Phe Ser Arg Asp Glu Val Ser Pro Arg
      115          120          125
Ser Arg Ser Pro Asp Leu Met Xaa Ser Ala His Leu Gly Leu Pro Lys
      130          135          140
Cys Trp Asp Tyr Arg Arg Glu Pro Leu Arg Pro Ala Gln Ile Ser Leu
      145          150          155          160
Leu Phe Ser Lys Ser Pro Ser Gln Asp Ile Gln Ala Lys Ala
      165          170

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<210> 5945

<211> 869

<212> DNA

<213> Homo sapiens

<400> 5945

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  120
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  180
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  360
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  420
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  480
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<210> 5946
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 5946
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 Arg Asp Phe Leu Arg Tyr Leu Gln Ser Leu Leu Ala Glu Val Glu Arg
 35 40 45
 Arg Ile Arg Arg Gly His Ala Arg Leu Ala Leu Ser Gln Asn Gln Gln
 50 55 60
 Ser Ser Gly Ala Ala Gly Pro Thr Gly Lys Asn Gly Glu Lys Ile Gln
 65 70 75 80
 Val Leu Thr Asp Lys Ile Asp Val Leu Leu Gln Gln Ile Glu Glu Leu
 85 90 95
 Gly Ser Glu Gly Lys Val Glu Glu Ala Gln Gly Met Met Lys Leu Val
 100 105 110
 Glu Gln Leu Lys Glu Glu Arg Glu Leu
 115 120

<210> 5947
 <211> 2283
 <212> DNA
 <213> Homo sapiens

<400> 5947
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 420
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2280
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2283

<210> 5948
 <211> 76
 <212> PRT
 <213> Homo sapiens

<400> 5948
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 Pro Arg Ala Ser Lys His His Tyr Ser Arg Ser Arg Ser Arg Ser Arg
 35 40 45
 Glu Arg Lys Arg Lys Ser Asp Asn Glu Gly Arg Lys His Arg Ser Arg
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 Ser Arg Ser Lys Glu Arg Ala Tyr Ala Arg Arg Asp
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<210> 5949
 <211> 4706
 <212> DNA
 <213> Homo sapiens

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<210> 5950

<211> 397

<212> PRT

<213> Homo sapiens

<400> 5950

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His	Ala	Met	Lys	Gly	Val	Ile	Arg	Val	Lys	Phe	Val	Asn	Asp	Leu	Gly
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Val	Asp	Glu	Ala	Gly	Ile	Asp	Gln	Asp	Gly	Val	Phe	Lys	Glu	Phe	Leu
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Glu	Glu	Ile	Ile	Lys	Arg	Val	Phe	Asp	Pro	Ala	Leu	Asn	Leu	Phe	Lys
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Thr	Thr	Ser	Gly	Asp	Glu	Arg	Leu	Tyr	Pro	Ser	Pro	Thr	Ser	Tyr	Ile
			85					90						95	
His	Glu	Asn	Tyr	Leu	Gln	Leu	Phe	Glu	Phe	Val	Gly	Lys	Met	Leu	Gly
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Lys	Ala	Val	Tyr	Glu	Gly	Ile	Val	Val	Asp	Val	Pro	Phe	Ala	Ser	Phe
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Phe	Leu	Ser	Gln	Leu	Leu	Gly	His	His	His	Ser	Val	Phe	Tyr	Ser	Ser
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			165					170						175	
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Thr	Ala	Ala	Leu	Ile	Ser	Gly	Phe	Arg	Ser	Ile	Ile	Lys	Pro	Glu	Trp
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Arg	Glu	Pro	Gly	Gly	Arg	Leu	Pro	Thr	Ser	Ser	Thr	Cys	Phe	Asn	Leu
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<210> 5951

<211> 1724

<212> DNA

<213> Homo sapiens

<400> 5951

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<210> 5952

<211> 378

<212> PRT

<213> Homo sapiens

<400> 5952

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		20					25					30			
Ala	Pro	Arg	Phe	Pro	Pro	Gly	Gly	Phe	Ala	Ala	Gly	Arg	Thr	Met	Leu
		35				40					45				
Leu	Lys	Glu	Tyr	Arg	Ile	Cys	Met	Pro	Leu	Thr	Val	Asp	Glu	Tyr	Lys
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Arg	Gly	Glu	Gly	Val	Glu	Val	Val	Gln	Asn	Glu	Pro	Phe	Glu	Asp	Pro
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<210> 5953

<211> 777

<212> DNA

<213> Homo sapiens

<400> 5953

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<210> 5954
 <211> 152
 <212> PRT
 <213> Homo sapiens

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 Arg Gln Leu Xaa Ser Ser Gly Pro Gly Asn Ser Gln Asn Ser Phe Leu
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 85 90 95
 Val Leu Glu Glu Ile Gln Gln Glu Leu Ile Asn Gln Glu Gln Ser Ile
 100 105 110
 Ile Ser Glu Tyr Glu Lys Ser Leu Gln Phe Asp Glu Lys Cys Leu Ser
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<210> 5955
 <211> 1459
 <212> DNA
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<400> 5955
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<210> 5956

<211> 431

<212> PRT

<213> Homo sapiens

<400> 5956

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<211> 855

<212> DNA

<213> Homo sapiens

<400> 5957

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<210> 5958

<211> 106

<212> PRT

<213> Homo sapiens

<400> 5958

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 35 40 45
 Ser Ser Gly Pro Gly Asn Ser Gln Asn Ser Phe Leu Val Gln Glu Val
 50 55 60
 Met Glu Glu Glu Trp Asn Ala Leu Gln Ser Val Glu Asn Cys Pro Glu
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105

<210> 5959
 <211> 830
 <212> DNA
 <213> Homo sapiens

<400> 5959
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 180
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 240
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 300
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 360
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 420
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 480
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 540
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 600
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 660
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 720
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<210> 5960
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 5960
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 20 25 30
 Glu Arg Glu Leu His Ser Val His Gly Tyr Pro Gly Thr Phe Ala Asn
 35 40 45
 Cys Met His Ile Leu Ser Glu Glu Thr Cys Phe Gln Arg Trp Val Thr
 50 55 60
 Gly Glu Arg Lys Phe Ala Leu Gln Lys Met Asp Ser Met Leu Ser Ser
 65 70 75 80
 Glu Ala Ala Trp Val Ser Gln Tyr Lys Asp Ile Thr Asp Val Asp Glu

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<210> 5962
<211> 114
<212> PRT
<213> Homo sapiens
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<400> 5962

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Leu Leu Pro Pro Gly Pro Thr Leu His Arg Asp Thr Arg Arg Glu Ser
          20           25           30
Leu Ser His Ser His Gln Pro Gly Leu Ser Gly Glu Gly Ala Gln Glu
          35           40           45
Gln Ala Arg Ile Asp Thr Gly Ile His Met Lys Arg Met Gln Thr Pro
          50           55           60
Arg His Pro Ala Leu Ser Gln Ser Leu Ile Lys Phe Gly Ile Leu Phe
65           70           75           80
Asp Pro Ser Ile Phe Phe Leu Glu Thr Gly Ser Arg Phe Ile Ala Gln
          85           90           95
Ala Glu Cys Ser Gly Tyr Ser Gln Ala Pro Leu Glu Arg Thr Ala Ala
          100          105          110
Pro Ser

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<210> 5963

<211> 1288

<212> DNA

<213> Homo sapiens

<400> 5963

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240
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420
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480
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660
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720
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780
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840
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900

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 1020
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 1080
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<210> 5964

<211> 222

<212> PRT

<213> Homo sapiens

<400> 5964

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			20					25				30			
Gln	Ile	Arg	Asp	Ile	Gln	Arg	Glu	Glu	Glu	Lys	Val	Lys	Arg	Ser	Val
	35						40					45			
Lys	Asp	Ala	Ala	Lys	Lys	Gly	Gln	Lys	Asp	Val	Cys	Ile	Val	Leu	Ala
	50					55					60				
Lys	Glu	Met	Ile	Arg	Ser	Arg	Lys	Ala	Val	Ser	Lys	Leu	Tyr	Ala	Ser
65					70					75				80	
Lys	Ala	His	Met	Asn	Ser	Val	Leu	Met	Gly	Met	Lys	Asn	Gln	Leu	Ala
			85						90					95	
Val	Leu	Arg	Val	Ala	Gly	Ser	Leu	Gln	Lys	Ser	Thr	Glu	Val	Met	Lys
			100						105					110	
Ala	Met	Gln	Ser	Leu	Val	Lys	Ile	Pro	Glu	Ile	Gln	Ala	Thr	Met	Arg
		115					120					125			
Glu	Leu	Ser	Lys	Glu	Met	Met	Lys	Ala	Gly	Ile	Ile	Glu	Glu	Met	Leu
	130						135					140			
Glu	Asp	Thr	Phe	Glu	Ser	Met	Asp	Asp	Gln	Glu	Glu	Met	Glu	Glu	Glu
145					150					155					160
Ala	Glu	Met	Glu	Ile	Asp	Arg	Ile	Leu	Phe	Glu	Ile	Thr	Ala	Gly	Ala
			165						170					175	
Leu	Gly	Lys	Ala	Pro	Ser	Lys	Val	Thr	Asp	Ala	Leu	Pro	Glu	Pro	Glu
		180						185					190		
Pro	Pro	Gly	Ala	Met	Ala	Ala	Ser	Glu	Asp	Glu	Glu	Glu	Glu	Glu	Glu
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Ala	Leu	Glu	Ala	Met	Gln	Ser	Arg	Leu	Ala	Thr	Leu	Arg	Ser		
	210						215					220			

<210> 5965

<211> 1011

<212> DNA

<213> Homo sapiens

<400> 5965

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 120
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 180
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 240
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 300
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 360
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 420
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 480
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 660
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 720
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 780
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 900
 aactgccttg gaggagataa accaatttta tgtctatcat gttatacaaa aatctagaaa
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<210> 5966

<211> 233

<212> PRT

<213> Homo sapiens

<400> 5966

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 20 25 30
 Pro Trp Lys Glu Ala Phe Arg Gln Arg Cys Leu Glu Arg Met Arg Asn
 35 40 45
 Ser Arg Asp Arg Leu Leu Asn Arg Tyr Arg Gln Ala Gly Ser Ser Gly
 50 55 60
 Pro Gly Asn Ser Gln Asn Ser Phe Leu Val Gln Glu Val Met Glu Glu
 65 70 75 80
 Glu Trp Asn Ala Leu Gln Xaa Gln Trp Xaa Asn Cys Pro Glu Asp Leu

85 90 95
 Ala Gln Leu Glu Glu Leu Ile Asp Met Ala Val Leu Glu Glu Ile Gln
 100 105 110
 Gln Glu Leu Ile Asn Gln Glu Gln Ser Ile Ile Ser Glu Tyr Glu Lys
 115 120 125
 Ser Leu Gln Phe Asp Glu Lys Cys Leu Ser Ile Met Leu Ala Glu Trp
 130 135 140
 Glu Ala Asn Pro Leu Ile Cys Pro Val Cys Thr Lys Tyr Asn Leu Arg
 145 150 155 160
 Ile Thr Ser Gly Val Val Val Cys Gln Cys Gly Leu Ser Ile Pro Ser
 165 170 175
 His Ser Ser Glu Leu Thr Glu Gln Lys Leu Arg Ala Cys Leu Glu Gly
 180 185 190
 Ser Ile Asn Glu His Ser Ala His Cys Pro His Thr Pro Glu Phe Ser
 195 200 205
 Val Thr Gly Gly Thr Glu Glu Lys Ser Ser Leu Leu Met Ser Cys Leu
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 Ala Cys Asp Thr Trp Ala Val Ile Leu
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<210> 5967

<211> 1806

<212> DNA

<213> Homo sapiens

<400> 5967

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 120
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 180
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 240
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 300
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 420
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 540
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 720
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 780
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 1620
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 1680
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<210> 5968

<211> 434

<212> PRT

<213> Homo sapiens

<400> 5968

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			20					25					30		
Gly	Thr	Ser	Ser	Leu	Ile	Ser	Gly	Leu	Ile	Leu	Ile	Phe	Glu	Trp	Trp
			35				40					45			
Tyr	Phe	Arg	Lys	Tyr	Gly	Thr	Ser	Phe	Ile	Glu	Gln	Val	Ser	Val	Ser
			50			55					60				
His	Leu	Arg	Pro	Leu	Leu	Gly	Gly	Val	Asp	Asn	Asn	Ser	Ser	Asn	Asn
65				70					75					80	
Ser	Asn	Ser	Ser	Asn	Gly	Asp	Ser	Asp	Ser	Asn	Arg	Gln	Ser	Val	Ser
				85				90						95	
Glu	Cys	Lys	Val	Trp	Arg	Asn	Pro	Leu	Asn	Leu	Phe	Arg	Gly	Ala	Glu

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<400> 5969
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120
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 240
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<210> 5970

<211> 143

<212> PRT

<213> Homo sapiens

<400> 5970

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Gln	Asn	Gly	Gln	Leu	Gly	Gly	Gly	Glu	Gly	Val	Pro	Asp	Leu	Gln	Pro
		20					25					30			
Gly	Val	Leu	Ala	Ser	Gln	Ala	Met	Ile	Glu	Lys	Ile	Leu	Ser	Glu	Asp
	35					40					45				
Pro	Arg	Trp	Gln	Asp	Ala	Asn	Phe	Val	Leu	Gly	Ser	Tyr	Lys	Thr	Glu
	50				55					60					
Gln	Cys	Pro	Lys	Pro	Pro	Arg	Leu	Cys	Arg	Gln	Gly	Tyr	Ala	Cys	Pro
65				70				75						80	
His	Tyr	His	Asn	Ser	Arg	Asp	Arg	Arg	Arg	Asn	Pro	Arg	Arg	Phe	Gln
			85				90							95	
Tyr	Arg	Ser	Thr	Pro	Cys	Pro	Ser	Val	Lys	His	Gly	Asp	Glu	Trp	Gly
		100				105						110			
Glu	Pro	Ser	Arg	Cys	Asp	Gly	Gly	Asp	Gly	Cys	Gln	Tyr	Cys	His	Ser
	115					120					125				
Arg	Thr	Glu	Gln	Gln	Phe	His	Pro	Glu	Ile	Tyr	Lys	Ser	Thr	Lys	
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<210> 5971

<211> 565

<212> DNA

<213> Homo sapiens

<400> 5971

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 120
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 180
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 300

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 420
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 480
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 565

<210> 5972

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5972

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Cys	Pro	Asn	Arg	Gln	His	Pro	Tyr	Phe	Ile	Asp	Gly	His	Pro	His	Phe
			20					25					30		
Arg	Asp	Ser	Ser	Leu	Leu	Tyr	Pro	His	Phe	Thr	Gly	Glu	Gly	Ile	Glu
		35				40						45			
Ala	Gln	Lys	Val	Arg	Ser	Leu	Leu	Gln	Asp	Asp	Gln	Leu	Asn	Gln	Asn
	50					55					60				
Phe	Arg	Ala	Ser	Asn	Thr	Lys	Cys	Val	Pro	Leu	Ser	Ser	Val	Ser	His
65					70					75				80	
Leu	Leu	Pro	Arg	Gly	Ser	Ala	Ser	Ser	Leu	Trp	Pro	Leu	Ser	Ile	Leu
				85					90					95	
Pro	Pro	Thr	Leu	Leu	Pro	Ala	Ser								
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<210> 5973

<211> 797

<212> DNA

<213> Homo sapiens

<400> 5973

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 180
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 360
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 420
 cccctccctc cggtgagtac ccggaagccg ttttggggtc gcagcggggg ggcagcttgt
 480

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 540
 ccgagagtgc gcggaggccc ggggtgcgagg agggcctgtt tctcttcagc cctgggttcac
 600
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 660
 gtctgtatgt cctcactggc ccttttggga ctttgccttg gcctcggttg tctcaggatt
 720
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 797

<210> 5974

<211> 107

<212> PRT

<213> Homo sapiens

<400> 5974

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Ser	Leu	Arg	Ile	Met	Asp	Ala	Arg	Ala	Gln	Leu	Leu	Leu	Arg	Val	Pro
			20					25					30		
His	Pro	Gly	Pro	Ser	Leu	Thr	Ser	Gly	Ala	Leu	Thr	His	Ile	Arg	Asp
		35					40					45			
Pro	His	Pro	Gly	Leu	Ser	Pro	Thr	Ser	Gly	Thr	Leu	Met	Pro	Gly	Arg
		50				55					60				
Arg	Arg	Gly	Gly	Pro	Ser	Phe	Gly	Thr	Pro	Ala	Leu	Arg	Arg	Arg	Lys
65					70					75					80
Cys	His	Arg	Glu	Ala	Pro	Ala	Ser	Gly	Leu	Ser	Thr	Ala	Ala	Arg	Glu
				85					90					95	
Arg	Leu	Trp	Trp	Pro	Arg	Ala	Arg	Val	Cys	Arg					
			100					105							

<210> 5975

<211> 2175

<212> DNA

<213> Homo sapiens

<400> 5975

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 120
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 180
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 240
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 300
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 aagcaggacc ttgcttatga acgtcagtat gaacagcaaa cctatcaggt gatccctgag
 420

gtgatcaaaa acttcatcca gtatttccac aaaactgtct cagatttggat tgaccagaaa
480
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<211> 564

<212> PRT

<213> Homo sapiens

<400> 5976

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Ser	Leu	Val	Gly	Leu	Leu	Arg	Leu	His	Ser	Leu	Leu	Gly	Asp	Tyr	Tyr
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Tyr	Ser	Arg	Val	Pro	Glu	Cys	Gln	Val	Thr	Thr	Tyr	Tyr	Tyr	Val	Gly
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480

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<211> 77

<212> PRT

<213> Homo sapiens

<400> 5978

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			20					25					30		
Gly	Arg	Gly	Gly	Gln	Ile	Ile	Xaa	Ala	Arg	Ser	Ser	Arg	Pro	Ala	Trp
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Thr	Thr	Trp	Arg	Xaa	Val	Phe	Thr	Lys	Asn	Thr	Lys	Ile	Ser	Trp	Ala
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<211> 1095

<212> DNA

<213> Homo sapiens

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 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Thr His Leu Val Leu Ile Cys Tyr Asp Val Met Asn Pro Thr Ser Tyr
 50 55 60
 Asp Asn Val Leu Ile Lys Trp Phe Pro Glu Val Thr His Phe Cys Arg
 65 70 75 80
 Gly Ile Pro Met Val Leu Ile Gly Cys Lys Thr Asp Leu Arg Lys Asp
 85 90 95
 Lys Glu Gln Leu Arg Lys Leu Arg Ala Ala Gln Leu Glu Pro Ile Thr
 100 105 110
 Tyr Met Gln Gly Leu Ser Ala Cys Glu Gln Ile Arg Ala Ala Leu Tyr
 115 120 125
 Leu Glu Cys Ser Ala Lys Phe Arg Glu Asn Val Glu Asp Val Phe Arg
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<210> 5981
 <211> 677
 <212> DNA
 <213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 5982

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Arg	Ile	Pro	Lys	Ser	Asp	Asp	Gly	Thr	Arg	Thr	Gly	Arg	Asn	Asp	Ser
		20					25					30			
Pro	Arg	Ala	Pro	Leu	Pro	Arg	Ser	Ser	Ala	Arg	Arg	Pro	Ser	Lys	Ala
		35				40					45				
Asn	Leu	His	Thr	Leu	Gly	Gln	Leu	Lys	Leu	Ser	Arg	Arg	Cys	Arg	Glu
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Pro	Arg	Leu	Gly	Arg	Ala	Gly	Gln	Gln	Arg	Leu	His	Pro	Arg	Thr	Arg
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Gly Lys

<210> 5983

<211> 790

<212> DNA

<213> Homo sapiens

<400> 5983

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 120

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<211> 186

<212> PRT

<213> Homo sapiens

<400> 5984

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			20				25					30			
Glu	Val	Asn	Arg	Gln	Cys	Pro	Gly	Glu	Lys	Glu	Pro	Val	Ser	Asp	Leu
		35					40					45			
Gln	Leu	Gly	Leu	Asp	Ala	Val	Glu	Pro	Thr	Ala	Leu	His	Lys	Thr	Leu
		50				55					60				
Glu	Thr	Pro	Ala	His	Asp	Arg	Ala	Glu	Pro	Asn	Ser	Gln	Leu	Asp	Ser
65					70					75				80	
Thr	His	Ser	Gly	Arg	Gly	Thr	Met	Tyr	Ser	Ser	Trp	Val	Lys	Ser	Pro
			85					90					95		
Asp	Arg	Thr	Gly	Val	Asn	Phe	Ser	Val	Asn	Ser	Asn	Leu	Arg	Asp	Leu
			100					105					110		
Thr	Pro	Ser	His	Gln	Leu	Glu	Val	Gly	Gly	Gly	Phe	Arg	Ile	Ser	Glu
		115				120						125			
Ser	Lys	Cys	Leu	Met	Gln	Asp	Thr	Arg	Gly	Met	Phe	Met	Glu	Thr	
		130				135				140					
Thr	Val	Phe	Cys	Thr	Ser	Glu	Asp	Gly	Leu	Val	Ser	Gly	Phe	Gly	Arg
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<210> 5985

<211> 737

<212> DNA

<213> Homo sapiens

<400> 5985

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420

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540

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<211> 165

<212> PRT

<213> Homo sapiens

<400> 5986

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10

15

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20

25

30

Asp Leu Leu Gln Asn Pro Tyr Phe Ser Lys Leu Leu Leu Asn Leu Ser

35

40

45

Gln His Val Asp Glu Ser Gly Leu Ser Leu Thr Leu Ala Lys Glu Gln

50

55

60

Ala Gln Ala Trp Lys Glu Val Arg Leu His Lys Thr Thr Trp Leu Arg

65

70

75

80

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85

90

95

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<212> DNA
<213> Homo sapiens
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<213> Homo sapiens

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<211> 1528

<212> DNA

<213> Homo sapiens

<400> 5995

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<212> PRT

<213> Homo sapiens

<400> 6000

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			245						250					255	
Lys	Glu	Lys	Met	Phe	Thr	Ile	Leu	Glu	Arg	Thr	Val	Thr	Thr	Arg	Ile
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Glu	Gly	Thr	Gln	Ala	Asp	Thr	Arg	Glu	Ser	Asp	Lys	Met	Trp	Leu	Val

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Ala Lys Asn Leu Met Val	Gln Cys Phe Pro Pro	His Tyr Glu Ile Phe
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Lys Asn Leu Leu Asn Met	Tyr His Gln Ala Leu	Ser Thr Arg Met Gln
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Asp Leu Ala Ser Glu Asp	Leu Glu Ala Asn Glu	Ile Val Ser Leu Leu
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Thr Trp Val Leu Asn Thr	Tyr Thr Ser Thr Glu	Met Met Arg Asn Val
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Glu Leu Ala Pro Glu Val	Asp Val Gly Thr Leu	Glu Pro Leu Leu Ser
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Asp Trp Val Lys Glu Thr	Glu Pro Glu Ala Asp	Gln Asp Gly Tyr Tyr
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Ala Gln Leu Tyr Lys Glu	Glu His Leu Arg Asn	Arg Gln His Pro His
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Cys Tyr Val Gln Tyr Met	Ile Ala Ile Ile Asn	Asn Cys Gln Thr Phe
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Lys Glu Ser Ile Val Ser	Leu Lys Arg Lys Tyr	Leu Lys Asn Glu Val
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Glu Glu Gly Val Ser Pro	Ser Gln Pro Ser Met	Asp Gly Ile Leu Asp
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Ala Ile Ala Lys Glu Gly	Cys Ser Gly Leu Leu	Glu Glu Val Phe Leu
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Glu Ala His Arg Arg Val	Val Val Glu Tyr Leu	Arg Ala Val Met Gln
610	615	620
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Lys Met Val Arg Glu Ala	Glu Gln Arg Arg Phe	Leu Phe Arg Lys Leu
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Ala Val Ala Glu Val Ile	Lys Leu Thr Asp Pro	Ser Leu Leu Tyr Leu
675	680	685
Glu Val Ser Thr Leu Val	Ser Lys Tyr Pro Asp	Ile Arg Asp Asp His
690	695	700
Ile Gly Ala Leu Leu Ala	Val Arg Gly Asp Ala	Ser Arg Asp Met Lys

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Gln Thr Ile Met Glu Thr Leu Glu Gln Gly Pro Ala Gln Ala Ser Pro						
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<210> 6001

<211> 2490

<212> DNA

<213> Homo sapiens

<400> 6001

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<210> 6002

<211> 263

<212> PRT

<213> Homo sapiens

<400> 6002

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Glu Asp Leu Arg Cys Pro Glu Thr Thr Ser Gln Ala Leu Pro Ala Phe
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Ala Val Gln Pro Val Ile Gly Ile Ser Gln Arg Val Arg Met Asn Ser
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Lys Glu Lys Lys Asp Leu Gly Thr Leu Gly Tyr Val Leu Gly Ile Thr
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Met Met Val Ile Ile Ile Ala Ile Gly Ala Gly Ile Ile Leu Gly Tyr
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Ser Tyr Lys Arg Gly Lys Asp Leu Lys Glu Gln His Asp Gln Lys Val
      195      200      205
Cys Glu Arg Glu Met Gln Arg Ile Thr Leu Pro Leu Ser Ala Phe Thr
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Asn Pro Thr Cys Glu Ile Val Asp Glu Lys Thr Val Val Val His Thr
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<210> 6003

<211> 3107

<212> DNA

<213> Homo sapiens

<400> 6003

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<210> 6004

<211> 140

<212> PRT

<213> Homo sapiens

<400> 6004

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Pro	Ala	Val	Pro	Lys	Val	Ala	Pro	Gly	Thr	Met	Pro	Thr	Arg	Pro	Glu
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Ser	Pro	Arg	Gly	Glu	Arg	Gly	Ser	Gly	Pro	His	Ala	Val	Gln	Gly	Val
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Ala	Leu	Pro	Xaa	Arg	Gly	Ser	Pro	Arg	Gly	Pro	Gly	Pro	Arg	Ala	Pro
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<210> 6005
 <211> 1735
 <212> DNA
 <213> Homo sapiens

<400> 6005
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<210> 6006

<211> 200

<212> PRT

<213> Homo sapiens

<400> 6006

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Gly	Glu	Ala	Gly	Glu	Met	Gly	Leu	Ser	Gly	Leu	Pro	Gly	Ala	Asp	Gly
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Pro	Gly	Pro	Val	Gly	Pro	Pro	Gly	Leu	Ile	Gly	Leu	Pro	Gly	Thr	Lys
		115				120					125				
Gly	Glu	Lys	Gly	Arg	Pro	Gly	Glu	Pro	Gly	Leu	Asp	Gly	Phe	Pro	Gly
	130				135					140					
Pro	Arg	Gly	Glu	Lys	Gly	Asp	Arg	Ser	Glu	Arg	Gly	Glu	Lys	Gly	Glu
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		165				170					175				
Gly	Pro	Pro	Gly	Leu	Asp	Gln	Pro	Cys	Pro	Val	Gly	Pro	Asp	Gly	Leu
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<210> 6007

<211> 693

<212> DNA

<213> Homo sapiens

<400> 6007

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<210> 6008

<211> 214

<212> PRT

<213> Homo sapiens

<400> 6008

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 50 55 60
 Ala Gln Pro Pro Ala Met Thr Ser Ser Arg Lys Gly Thr Phe Thr Asp
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 115 120 125
 Ser Asn Leu Gly Gly Ser Ala Pro Ile Ser Ala Ala Ser Ala Thr Ser
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 Leu Gly His Phe Thr Lys Ser Met Cys Pro Pro Gln Gln Tyr Gly Phe
 145 150 155 160
 Pro Ala Thr Pro Phe Gly Ala Gln Trp Ser Gly Thr Gly Gly Pro Ala

165 170 175
 Pro Gln Pro Leu Gly Gln Phe Gln Pro Val Gly Thr Ala Ser Leu Gln
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 Ser Asn Leu Arg Thr Thr
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<210> 6009
 <211> 1570
 <212> DNA
 <213> Homo sapiens

<400> 6009
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 420
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<210> 6010
 <211> 468
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Ala Met Ala Cys Ala Leu Gly Tyr Asp Ile His Phe His Asp Lys Lys
 50 55 60
 Ile Leu Leu Leu Glu Ala Gly Pro Lys Lys Val Leu Glu Lys Leu Ser
 65 70 75 80
 Glu Thr Tyr Ser Asn Arg Val Ser Ser Ile Ser Pro Gly Ser Ala Thr
 85 90 95
 Leu Leu Ser Ser Phe Gly Ala Trp Asp His Ile Cys Asn Met Arg Tyr
 100 105 110
 Arg Ala Phe Arg Arg Met Gln Val Trp Asp Ala Cys Ser Glu Ala Leu
 115 120 125
 Ile Met Phe Asp Lys Asp Asn Leu Asp Asp Met Gly Tyr Ile Val Glu
 130 135 140
 Asn Asp Val Ile Met His Ala Leu Thr Lys Gln Leu Glu Ala Val Ser
 145 150 155 160
 Asp Arg Val Thr Val Leu Tyr Arg Ser Lys Ala Ile Arg Tyr Thr Trp
 165 170 175
 Pro Cys Pro Phe Pro Met Ala Asp Ser Ser Pro Trp Val His Ile Thr
 180 185 190
 Leu Gly Asp Gly Ser Thr Phe Gln Thr Lys Leu Leu Ile Gly Ala Asp
 195 200 205
 Gly His Asn Ser Gly Val Arg Gln Ala Val Gly Ile Gln Asn Val Ser
 210 215 220
 Trp Asn Tyr Asp Gln Ser Ala Val Val Ala Thr Leu His Leu Ser Glu
 225 230 235 240
 Ala Thr Glu Asn Asn Val Ala Trp Gln Arg Phe Leu Pro Ser Gly Pro
 245 250 255
 Ile Ala Leu Leu Pro Leu Ser Asp Thr Leu Ser Ser Leu Val Trp Ser

260 265 270
 Thr Ser His Glu His Ala Ala Glu Leu Val Ser Met Asp Glu Glu Lys
 275 280 285
 Phe Val Asp Ala Val Asn Ser Ala Phe Trp Ser Asp Ala Asp His Thr
 290 295 300
 Asp Phe Ile Asp Thr Ala Gly Ala Met Leu Gln Tyr Pro Val Ser Leu
 305 310 315 320
 Leu Lys Pro Thr Lys Val Ser Ala Arg Gln Leu Pro Pro Ser Val Pro
 325 330 335
 Trp Val Asp Ala Lys Ser Arg Val Leu Phe Pro Leu Gly Leu Gly His
 340 345 350
 Ala Ala Glu Tyr Val Arg Pro Arg Val Ala Leu Ile Gly Asp Ala Ala
 355 360 365
 His Arg Val His Pro Leu Ala Gly Gln Gly Val Asn Met Gly Phe Gly
 370 375 380
 Asp Ile Ser Ser Leu Ala His His Leu Ser Thr Ala Ala Phe Asn Gly
 385 390 395 400
 Lys Asp Leu Gly Ser Val Ser His Leu Thr Gly Tyr Glu Thr Glu Arg
 405 410 415
 Gln Arg His Asn Thr Ala Leu Leu Ala Ala Thr Asp Leu Leu Lys Arg
 420 425 430
 Leu Tyr Ser Thr Ser Ala Ser Pro Leu Val Leu Leu Arg Thr Trp Gly
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 Phe Ala Ser Lys
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<210> 6011

<211> 1331

<212> DNA

<213> Homo sapiens

<400> 6011

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<210> 6012

<211> 219

<212> PRT

<213> Homo sapiens

<400> 6012

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			20					25					30		
Lys	Glu	Pro	Gly	Asp	Ser	Ala	Gln	Phe	Thr	Lys	Ala	Ile	Ala	Ile	Ile
		35					40					45			
Phe	Pro	Phe	Leu	Tyr	Leu	Leu	Glu	Lys	Val	Glu	Cys	Thr	Pro	Ser	Gln
	50					55				60					
Glu	His	Leu	Lys	His	Gln	Thr	Val	Tyr	Arg	Leu	Leu	Lys	Cys	Ala	Pro
65					70				75					80	
Arg	Gly	Lys	Asn	Gly	Phe	Thr	Pro	Leu	His	Met	Ala	Val	Asp	Lys	Asp
			85					90					95		
Thr	Thr	Asn	Val	Gly	Arg	Tyr	Pro	Val	Gly	Arg	Phe	Pro	Ser	Leu	His
			100					105					110		
Val	Val	Lys	Val	Leu	Leu	Asp	Cys	Gly	Ala	Asp	Pro	Asp	Ser	Arg	Asp
		115					120					125			
Phe	Asp	Asn	Asn	Thr	Pro	Leu	His	Ile	Ala	Ala	Gln	Asn	Asn	Cys	Pro
	130					135					140				
Ala	Ile	Met	Asn	Ala	Leu	Ile	Glu	Ala	Gly	Ala	His	Met	Asp	Ala	Thr
145					150				155					160	
Asn	Ala	Phe	Lys	Lys	Thr	Ala	Tyr	Glu	Leu	Leu	Asp	Glu	Lys	Leu	Leu

	165		170		175
Ala Arg Gly Thr Met Gln Pro Phe Asn Tyr Val Thr Leu Gln Cys Leu					
	180		185		190
Ala Ala Arg Ala Leu Asp Lys Asn Lys Ile Pro Tyr Lys Gly Phe Ile					
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Pro Glu Asp Leu Glu Ala Phe Ile Glu Leu His					
	210		215		

<210> 6013
 <211> 2204
 <212> DNA
 <213> Homo sapiens

<400> 6013
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 2100
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<210> 6014

<211> 182

<212> PRT

<213> Homo sapiens

<400> 6014

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		20					25					30			
Val	Lys	His	Ala	Lys	Val	Tyr	Thr	Cys	Thr	Ile	Cys	Ser	Arg	Ala	Tyr
		35				40					45				
Thr	Ser	Glu	Thr	Tyr	Leu	Met	Lys	His	Met	Arg	Lys	His	Asn	Pro	Pro
	50				55				60						
Asp	Leu	Gln	Gln	Gln	Val	Gln	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Val	Ala
65				70					75					80	
Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala
			85			90							95		
Gln	Ala	Gln	Ala	Gln	Ala	Ser	Gln	Ala	Ser	Gln	Gln	Gln	Gln	Gln	Gln

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          100          105          110
Gln Gln Gln Gln Gln Gln Gln Gln Gln Pro Pro Pro His Phe Gln Ser
          115          120          125
Pro Gly Ala Ala Pro Gln Gly Gly Gly Gly Asp Ser Asn Pro Asn
          130          135          140
Pro Pro Pro Gln Cys Ser Phe Asp Leu Thr Pro Tyr Lys Thr Ala Glu
145          150          155          160
His His Lys Asp Ile Cys Leu Thr Val Thr Thr Ser Thr Ile Gln Val
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Glu His Leu Ala Ser Ser
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<210> 6015
 <211> 612
 <212> DNA
 <213> Homo sapiens

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<400> 6015
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480
gccagtgaga gaacagtcac acgataaagg cacagcacag cagttgggtg tctcttttta
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612

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<210> 6016
 <211> 99
 <212> PRT
 <213> Homo sapiens

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<400> 6016
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20          25          30
Arg Cys Lys Leu Asn Asn Asn Ser Trp Ser Gly Leu Thr Cys Pro Thr
35          40          45
Leu Ser Met Ser Cys Asn Gln Asn Lys Leu Asp Ser Pro Gly Arg Ala

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4000> 6017					
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660					
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<210> 6018

<211> 537

<212> PRT

<213> Homo sapiens

<400> 6018

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 35 40 45
 Asn Ser Gln Gln Ala Ala Asn Val Leu Ser Gly Ala Cys Gly Leu Gln
 50 55 60
 Arg Gly Asp Arg Val Ala Val Met Leu Pro Arg Val Pro Glu Trp Trp
 65 70 75 80
 Leu Val Ile Leu Gly Cys Ile Arg Ala Gly Leu Ile Phe Met Pro Gly
 85 90 95
 Thr Ile Gln Met Lys Ser Thr Asp Ile Leu Tyr Arg Leu Gln Met Ser
 100 105 110
 Lys Ala Lys Ala Ile Val Ala Gly Asp Glu Val Ile Gln Glu Val Asp
 115 120 125
 Thr Val Ala Ser Glu Cys Pro Ser Leu Arg Ile Lys Leu Leu Val Ser

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145	150	155	160	
Ala Ser Thr Thr His	His Cys Val Glu Thr Gly	Ser Gln Glu Ala	Ser	
165	170	175		
Ala Ile Tyr Phe Thr	Ser Gly Thr Ser Gly	Leu Pro Lys Met	Ala Glu	
180	185	190		
His Ser Tyr Ser Ser	Leu Gly Leu Lys Ala	Lys Met Asp Ala	Gly Trp	
195	200	205		
Thr Gly Leu Gln Ala	Ser Asp Ile Met Trp	Thr Ile Ser Asp	Thr Gly	
210	215	220		
Trp Ile Leu Asn Ile	Leu Gly Ser Leu Leu	Glu Ser Trp Thr	Leu Gly	
225	230	235	240	
Ala Cys Thr Phe Val	His Leu Leu Pro Lys	Phe Asp Pro Leu	Val Ile	
245	250	255		
Leu Lys Thr Leu Ser	Ser Tyr Pro Ile Lys	Ser Met Met Gly	Ala Pro	
260	265	270		
Ile Val Tyr Arg Met	Leu Leu Gln Gln	Asp Leu Ser Ser	Tyr Lys Phe	
275	280	285		
Pro His Leu Gln Asn	Cys Leu Ala Gly Gly	Glu Ser Leu Leu	Pro Glu	
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Thr Leu Glu Asn Trp	Arg Ala Gln Thr Gly	Leu Asp Ile Arg	Glu Phe	
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Gln Phe Met Gly Arg	Ala Asp Asp Ile Ile	Asn Ser Ser Gly	Tyr Arg	
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Ile Gly Pro Ser Glu	Val Glu Asn Ala Leu	Met Lys His Pro	Ala Val	
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Val Glu Thr Ala Val	Ile Ser Ser Pro Asp	Pro Val Arg Gly	Glu Val	
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<211> 3002

<212> DNA

<213> Homo sapiens

<400> 6019

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<211> 387

<212> PRT

<213> Homo sapiens

<400> 6020

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Ile Glu Asp Ile Cys Ile Cys Cys Gly Ser Leu Gln Val His Thr Gln
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His Pro Leu Phe Glu Gly Ile Cys Ala Pro Cys Lys Asp Lys Phe
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Leu Asp Ala Leu Phe Leu Tyr Asp Asp Asp Gly Tyr Gln Ser Tyr Cys
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Ser Ile Cys Cys Ser Gly Glu Thr Leu Leu Ile Cys Gly Asn Pro Asp
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Cys Thr Arg Cys Tyr Cys Phe Glu Cys Val Asp Ser Leu Val Gly Pro
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<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 6022

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<211> 1014

<212> DNA

<213> Homo sapiens

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<211> 100

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<213> Homo sapiens

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 Gln Ile Ala Ser Ser Ala Phe Pro Gly Leu Gly Ser Leu Gly Gly Gln
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<211> 496

<212> PRT

<213> Homo sapiens

<400> 6026

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 <212> DNA
 <213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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<210> 6031

<211> 1316

<212> DNA

<213> Homo sapiens

<400> 6031

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 Met Ala Phe Phe Pro Val Trp Asn His Leu Tyr Arg Phe Leu Arg Asn
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<211> 214

<212> PRT

<213> Homo sapiens

<400> 6038

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			20					25					30		
His	Gly	Gly	Thr	Cys	Ser	Arg	Gln	Glu	Leu	Gly	Val	Ser	Asp	Val	Leu
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Gly	Tyr	Val	His	Pro	Asp	Leu	Leu	Lys	Asp	Phe	Cys	Met	Asn	Pro	Gln
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Pro	Ala	Leu	Lys	Ile	Thr	Arg	Arg	Tyr	Ala	Phe	Ala	His	Ile	Leu	Thr
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Val	Leu	Gln	Cys	Ala	Thr	Val	Ile	Gly	Phe	Ser	Tyr	Trp	Ala	Ser	Glu
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Leu	Ile	Leu	Ala	Gln	Gln	Gln	Gln	His	Lys	Lys	Tyr	His	Gly	Ser	Gln
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Val	Tyr	Val	Thr	Phe	Ala	Val	Ser	Phe	Tyr	Leu	Val	Ala	Gly	Ala	Gly
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Gly	Ala	Ser	Ile	Leu	Ala	Thr	Ala	Ala	Asn	Leu	Leu	Arg	His	Tyr	Pro
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Thr	Glu	Glu	Glu	Glu	Gln	Ala	Leu	Glu	Leu	Leu	Ser	Glu	Met	Glu	Glu
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Asn	Glu	Pro	Tyr	Pro	Ala	Glu	Tyr	Glu	Val	Ile	Asn	Gln	Phe	Gln	Pro
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 <213> Homo sapiens

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 240
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 <211> 312
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 <213> Homo sapiens

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Gln Val Trp	Ala Ala Glu Ser	Ala Leu Arg	Gly Glu Pro	Leu Trp Ala	
35		40		45	
Gln Asn Val	Val Pro Glu Ala	Glu Gly Glu Asp	Asp Pro Ala Gly	Glu	
50		55		60	
Ala Gln Ala	Gly Arg Leu Pro	Leu Leu Pro Cys	Ala Arg Ala Tyr	Val	
65		70		75	80
Ser Pro Arg	Ala Pro Phe Tyr	Arg Pro Leu Ala	Pro Glu Leu Arg	Ala	
	85		90	95	
Arg Gln Leu	Glu Leu Gly Ala	Glu His Ala Leu	Leu Leu Asp	Ala Ala	
	100		105	110	
Gly Gln Val	Phe Ser Trp Gly	Gly Gly Arg His	Gly Gln Leu Gly	His	
	115		120	125	
Gly Thr Leu	Glu Ala Glu Leu	Glu Pro Arg Leu	Leu Glu Ala Leu	Gln	
	130		135	140	
Gly Leu Val	Met Ala Glu Val	Ala Ala Gly Gly	Trp His Ser Val	Cys	
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Val Ser Glu	Thr Gly Asp Ile	Tyr Ile Trp Gly	Trp Asn Glu Ser	Gly	
	165		170	175	
Gln Leu Ala	Leu Pro Thr Arg	Asn Leu Ala Glu	Asp Gly Glu Thr	Val	
	180		185	190	
Ala Arg Glu	Ala Thr Glu Leu	Asn Glu Asp Gly	Ser Gln Val Lys	Arg	
	195		200	205	
Thr Gly Gly	Ala Glu Asp Gly	Ala Pro Ala Pro	Phe Ile Ala Val	Gln	
	210		215	220	
Pro Phe Pro	Ala Leu Leu Asp	Leu Pro Met Gly	Ser Asp Ala Val	Lys	
	225		230	235	240
Ala Ser Cys	Gly Ser Arg His	Thr Ala Val Val	Thr Arg Thr Gly	Glu	
	245		250	255	
Leu Tyr Thr	Trp Gly Trp Gly	Lys Tyr Gly Gln	Leu Gly His Glu	Asp	
	260		265	270	
Thr Thr Ser	Leu Asp Arg Pro	Arg Arg Val Glu	Tyr Phe Val Asp	Lys	
	275		280	285	
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<210> 6041

<211> 291

<212> DNA

<213> Homo sapiens

<400> 6041

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<210> 6042
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 Arg Arg Ile Glu Glu Glu Arg Leu Arg Leu Glu Gln Gln Lys Gln Gln
 35 40 45
 Ile Met Ala Ala Leu Asn Ser Gln Thr Ala Val Gln Phe Gln Gln Tyr
 50 55 60
 Ala Ala Gln Gln Tyr Pro Gly Asn Tyr Glu Gln Gln Gln Ile Leu Ile
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 <212> DNA
 <213> Homo sapiens

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<210> 6044
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 <212> PRT
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<400> 6044

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Lys Ile Ala Pro Leu Glu Ser His His Arg Pro Lys Arg Pro Asp Asp
      35           40           45
Pro Pro Gly Thr Leu Asn Pro Cys Pro Glu Arg Gly Gly Ala Gly Val
      50           55           60
Trp Ile Pro Ala Gly Ser Phe Gly Thr Gly Lys Asn Arg Gly Cys Ser
65           70           75           80
Asp Arg Val Phe Thr Lys Thr Cys Ile Arg Gln Asp Pro Gly Arg Met
      85           90           95
Trp Val Ala Pro Pro Leu Cys Trp Ala Arg Arg Met Cys Pro His Arg
      100          105          110
Ser Gln Ile Leu Phe Pro Gln Trp Val Val Gln Asp Thr Leu Asn Phe
      115          120          125
Cys Met Asn Trp Asp Ile Gln Asn Ser Leu Glu Gln Pro Pro Pro Ser
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<210> 6045

<211> 1916

<212> DNA

<213> Homo sapiens

<400> 6045

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<210> 6046

<211> 457

<212> PRT

<213> Homo sapiens

<400> 6046

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Glu	Val	Ile	Ala	Val	Val	Met	Asp	Val	Phe	Thr	Asp	Ile	Asp	Ile	Phe
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Val	Ile	Leu	Ser	Gly	Gln	Val	Val	Glu	His	Phe	Asp	Leu	Glu	Phe	Arg
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Ile	Leu	Tyr	Ala	Gln	Ser	Lys	Pro	Ile	Ser	Pro	Lys	Leu	Leu	Ser	His
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Phe	Gln	Ser	Ser	Asn	Lys	Phe	Asp	His	Leu	Thr	Asn	Arg	Lys	Pro	Gln
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Lys	Glu	Arg	Gln	Phe	His	Phe	Ala	Gly	Ile	Arg	Ser	Arg	Leu	Asn	His
			405						410					415	
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<210> 6047

<211> 773

<212> DNA

<213> Homo sapiens

<400> 6047

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<213> Homo sapiens

<400> 6048

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<212> PRT

<213> Homo sapiens

<400> 6052

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<211> 3257

<212> DNA

<213> Homo sapiens

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<400> 6054

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Ser	Ser	Leu	Leu	Pro	Gln	Ser	Pro	Ala	Pro	Thr	Glu	His	Leu	Asn	Ser

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<211> 285

<212> PRT

<213> Homo sapiens

<400> 6056

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<210> 6057

<211> 3924

<212> DNA

<213> Homo sapiens

<400> 6057

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<211> 500

<212> PRT

<213> Homo sapiens

<400> 6058

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225          230          235          240
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<212> DNA

<213> Homo sapiens

<400> 6059

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<212> DNA

<213> Homo sapiens

<400> 6061

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<211> 226

<212> PRT

<213> Homo sapiens

<400> 6062

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Asp	Asp	Val	Val	Ile	Thr	Asn	Pro	His	Ile	Glu	Ala	Ile	Leu	Glu	Asn
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			85					90					95		
Ile	Leu	Lys	Ile	Cys	His	Thr	Leu	Thr	Glu	Lys	Leu	Val	Ala	Met	Thr
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Met	Gly	Ser	Gly	Ala	Lys	Met	Lys	Thr	Ser	Ala	Ser	Val	Ser	Asp	Ile
			115				120					125			
Ile	Val	Val	Ala	Lys	Arg	Ile	Ser	Pro	Arg	Val	Asp	Asp	Val	Val	Lys
			130				135				140				
Ser	Met	Tyr	Pro	Pro	Leu	Asp	Pro	Lys	Leu	Leu	Asp	Ala	Arg	Thr	Thr
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Ala	Leu	Leu	Leu	Ser	Val	Ser	His	Leu	Val	Leu	Val	Thr	Arg	Asn	Ala
			165					170					175		
Cys	His	Leu	Thr	Gly	Gly	Leu	Asp	Trp	Ile	Asp	Gln	Ser	Leu	Ser	Ala
			180					185				190			
Ala	Glu	Glu	His	Leu	Glu	Val	Leu	Arg	Glu	Ala	Ala	Leu	Ala	Ser	Glu
			195				200				205				
Pro	Asp	Lys	Gly	Leu	Pro	Gly	Pro	Glu	Gly	Phe	Leu	Gln	Glu	Gln	Ser
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<210> 6063

<211> 2286

<212> DNA

<213> Homo sapiens

<400> 6063

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<211> 233

<212> PRT

<213> Homo sapiens

<400> 6064

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			20				25					30			
Phe	Leu	His	Pro	Asp	Leu	Gly	Val	Gly	Gly	Ala	Glu	Arg	Leu	Val	Leu
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Thr	Ala	His	Tyr	Asp	Pro	Gly	His	Cys	Phe	Ala	Glu	Ser	Arg	Glu	Leu
65				70				75			80				
Pro	Val	Arg	Cys	Ala	Gly	Asp	Trp	Leu	Pro	Arg	Gly	Leu	Gly	Trp	Gly
			85				90				95				
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			100				105				110				
Leu	Tyr	Val	Leu	Phe	Leu	Ala	Asp	Glu	Glu	Phe	Asp	Val	Val	Val	Cys
		115				120				125					
Asp	Gln	Val	Ser	Ala	Cys	Ile	Pro	Val	Phe	Arg	Leu	Ala	Arg	Arg	Arg
	130					135				140					
Lys	Lys	Ile	Leu	Phe	Tyr	Cys	His	Phe	Pro	Asp	Leu	Leu	Leu	Thr	Lys

145		150		155		160									
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			165						170					175	
Glu	Glu	Tyr	Thr	Gly	Met	Ala	Asp	Cys	Ile	Leu	Val	Asn	Ser	Gln	
			180					185				190			
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		195					200					205			
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<210> 6065

<211> 2084

<212> DNA

<213> Homo sapiens

<400> 6065

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420
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720
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780
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1080

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<210> 6066

<211> 80

<212> PRT

<213> Homo sapiens

<400> 6066

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Arg	Val	Leu	Arg	Gly	Val	Asp	Asp	Leu	Asp	Phe	Phe	Ile	Gly	Asp	Glu
		20						25				30			
Ala	Ile	Asp	Lys	Pro	Thr	Tyr	Ala	Thr	Lys	Trp	Pro	Ile	Arg	His	Gly
		35					40				45				
Ile	Ile	Glu	Asp	Trp	Asp	Leu	Met	Glu	Arg	Phe	Met	Glu	Gln	Val	Val
	50					55				60					
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<210> 6067

<211> 406

<212> DNA

<213> Homo sapiens

<400> 6067

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300
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<210> 6068

<211> 117

<212> PRT

<213> Homo sapiens

<400> 6068

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20           25           30
Ser Leu Phe Leu Ser Gly Asn Val Ser Ser Arg Arg Met Arg Thr Ala
35           40           45
Ser Arg Ser Ser Glu Pro Pro Ala Cys Pro Arg His Trp Pro Cys Pro
50           55           60
Pro Gly Leu Pro Phe Gly Gln Gly Ala Val Ala Arg Ala Ala Pro Cys
65           70           75           80
Pro Ala Tyr Ser His Ser Ala Val Gly Arg Pro Pro Leu Pro Arg Lys
85           90           95
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115

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<210> 6069

<211> 456

<212> DNA

<213> Homo sapiens

<400> 6069

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120
ctggagtact gtatcatggt cattggggtc cccaacgtgg gcaagtcctc cctcatcaac
180

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 300
 ctgtcaagag ctctgcaggc gtctggcacc tgccgacctc tgtgtggctt ccggctgctg
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<210> 6070

<211> 148

<212> PRT

<213> Homo sapiens

<400> 6070

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Asn	Val	Lys	Gln	Ile	Ile	Pro	Met	Val	Thr	Glu	Leu	Ile	Gly	Arg	Ser
		20						25					30		
His	Arg	Tyr	His	Arg	Lys	Glu	Asn	Leu	Glu	Tyr	Cys	Ile	Met	Val	Ile
		35					40					45			
Gly	Val	Pro	Asn	Val	Gly	Lys	Ser	Ser	Leu	Ile	Asn	Ser	Leu	Arg	Arg
		50				55					60				
Gln	His	Leu	Arg	Lys	Gly	Lys	Ala	Thr	Arg	Val	Gly	Gly	Glu	Pro	Gly
65					70					75				80	
Ile	Thr	Arg	Ala	Val	Met	Ser	Lys	Ile	Gln	Val	Glu	Ser	Ser	Gly	Ala
			85						90					95	
Arg	Pro	Ser	Thr	Leu	Ser	Arg	Ala	Leu	Gln	Ala	Ser	Gly	Thr	Cys	Arg
		100						105					110		
Pro	Leu	Cys	Gly	Phe	Arg	Leu	Leu	Thr	Thr	Leu	Pro	Ser	Pro	Pro	Leu
		115					120					125			
Ser	Val	Pro	Ala	Glu	His	Pro	Arg	Gly	Arg	His	Cys	Pro	Ala	Leu	Ile
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<210> 6071

<211> 2633

<212> DNA

<213> Homo sapiens

<400> 6071

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<210> 6072

<211> 76

<212> PRT

<213> Homo sapiens

<400> 6072

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Ala	Glu	Ala	Gly	Gly	Ser	Phe	Glu	Val	Arg	Ser	Ser	Arg	Pro	Ala	Trp
			20					25					30		
Pro	Thr	Trp	Arg	Asn	Pro	Ile	Ser	Thr	Lys	Asn	Thr	Lys	Ile	Asn	Lys
			35					40					45		
Ala	Trp	Trp	Arg	Val	Pro	Val	Val	Pro	Ala	Thr	Arg	Glu	Ala	Glu	Ala
			50					55				60			
Gly	Glu	Ser	Leu	Glu	Pro	Gly	Arg	Arg	Arg	Phe	Gln				
65					70					75					

<210> 6073

<211> 387

<212> DNA

<213> Homo sapiens

<400> 6073

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<210> 6074

<211> 69

<212> PRT

<213> Homo sapiens

<400> 6074

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		20						25				30			
Ala	Pro	Thr	Gly	Pro	Phe	Ser	Pro	Arg	Met	Lys	Pro	Ala	Gly	Ser	Val
		35					40				45				
Asn	Asp	Met	Ala	Leu	Asp	Ala	Phe	Asp	Leu	Asp	Arg	Met	Lys	Gln	Glu
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<210> 6075

<211> 4668

<212> DNA

<213> Homo sapiens

<400> 6075

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<211> 601

<212> PRT

<213> Homo sapiens

<400> 6076

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			100					105					110		
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<210> 6077

<211> 2093

<212> DNA

<213> Homo sapiens

<400> 6077

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<210> 6078

<211> 213

<212> PRT

<213> Homo sapiens

<400> 6078

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Ser	Gly	Arg	Glu	Gly	Ala	Ser	Gly	Pro	Gly	Val	Gly	Pro	His	Ile	Tyr
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Val	Arg	Glu	Ala	Glu	Asp	Arg	Glu	Leu	Val	Thr	Met	Ala	Gly	Pro	Gln
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				85					90					95	
Asp	Arg	Phe	Asp	Glu	Gly	Glu	Asp	Gly	Glu	Gly	Asp	Phe	Leu	Val	Val
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Gly	Ser	Ile	Arg	Lys	Leu	Ala	Ser	Ala	Ser	Leu	Leu	Asp	Thr	Asp	Lys
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Arg	Tyr	Cys	Gly	Lys	Thr	Thr	Ser	Arg	Lys	Ala	Trp	Asn	Glu	Asp	His
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Glu	Gly	Ser	Gly	Asp	Glu	Asp	Ser	Glu	Gly	Leu	Gly	Leu	Glu	Glu	Tyr
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Asp	Glu	Asp	Asp	Leu	Gly	Ala	Ala	Glu	Glu	Gln	Glu	Cys	Gly	Asp	Gln

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<210> 6079
 <211> 651
 <212> DNA
 <213> Homo sapiens

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<210> 6080
 <211> 162
 <212> PRT
 <213> Homo sapiens

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 Gln Leu Gln Gly Gly Arg Phe Leu Met Gly Thr Asn Ser Pro Asp Ser
 35 40 45
 Arg Asp Gly Glu Gly Pro Val Arg Glu Ala Thr Val Lys Pro Phe Ala
 50 55 60
 Ile Asp Ile Phe Pro Val Thr Asn Lys Asp Phe Arg Asp Phe Val Arg
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<400> 6082
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Val Ile Pro Leu Glu Asp Pro Leu Gly Pro Ala Val Ile Thr Leu Leu
 35          40          45
Leu Asp Glu Cys Pro Leu Pro Thr Lys Asp Ala Leu Gln Lys Leu Thr
 50          55          60
Glu Ile Leu Asn Leu Asn Gly Glu Val Ala Cys Gln Asp Ser Ser His

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          100          105          110
Glu Tyr Leu Leu Gln Cys Leu Lys Leu Gln Ser His Pro Thr Val Met
          115          120          125
Leu Phe Ala Leu Ile Ala Leu Glu Lys Phe Ala Gln Thr Ser Glu Asn
          130          135          140
Lys Leu Thr Ile Ser Glu Ser Ser Ile Ser Asp Arg Leu Val Thr Leu
145          150          155          160
Glu Ser Trp Ala Asn Asp Pro Asp Tyr Leu Lys Arg Gln Val Gly Phe
          165          170          175
Cys Ala Gln Trp Ser Leu Asp Asn Leu Phe Leu Lys Glu Gly Arg Gln
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<210> 6083
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 <212> DNA
 <213> Homo sapiens

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<210> 6084
 <211> 101
 <212> PRT
 <213> Homo sapiens

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<400> 6084
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Leu Ile Val Glu Gly His Leu Thr Lys Ala Val Glu Glu Thr Lys Leu
          35          40          45
Ser Lys Glu Asn Gln Thr Arg Ala Lys Glu Ser Asp Phe Ser Asp Thr
          50          55          60
Leu Ser Pro Ser Lys Glu Lys Ser Ser Asp Asp Thr Thr Asp Ala Gln

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65		70		75		80									
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Lys	Asp	Asp	Leu	Gln											
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<210> 6085

<211> 2307

<212> DNA

<213> Homo sapiens

<400> 6085

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1140

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1260

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<212> PRT

<213> Homo sapiens

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<211> 4211

<212> DNA

<213> Homo sapiens

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<211> 839

<212> PRT

<213> Homo sapiens

<400> 6090

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Gln Phe Leu Thr Ile Leu Pro Glu Glu Phe Gln Pro Trp Val Arg Glu
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Val Leu Pro Arg Lys Met Ala Thr Pro Gly Ala Val Gln Glu Ser Cys
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Gly Phe Gly Arg Arg Ser His Leu Ala Gly His Leu Arg Leu His Ser
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Arg Glu Lys Ser His Gln Cys Arg Glu Cys Gly Glu Ile Phe Phe Gln
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Tyr Val Ser Leu Ile Glu His Gln Val Leu His Met Gly Gln Lys Asn
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Ser Thr Lys Ser His Gln Cys His Glu Cys Gly Arg Gly Phe Thr Leu
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Lys Ser His Leu Asn Gln His Gln Arg Ile His Thr Gly Glu Lys Pro
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<213> Homo sapiens

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<210> 6092

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<212> PRT

<213> Homo sapiens

<400> 6092

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Pro Ser Arg Ala Ala Ser His Lys Pro Ser Asn Glu Gln Arg Asp Ala
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<213> Homo sapiens

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<211> 136

<212> PRT

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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<210> 6100

<211> 1102

<212> PRT

<213> Homo sapiens

<400> 6100

Gly Ala Ala Gly Ala Gly Thr Gly Gly Ala Gly Pro Ala Gly Arg Leu
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 Leu Pro Pro Pro Ala Pro Gly Ser Pro Ala Ala Pro Ala Ala Val Ser
 20 25 30
 Pro Ala Ala Gly Gln Pro Arg Pro Pro Ala Pro Ala Ser Arg Gly Pro

[illegible]


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465          470          475          480
Leu Leu Asn Gly Met Gly Pro Leu Gly Arg Arg Ala Ser Asp Gly Gly
          485          490          495
Ala Asn Ile Gln Leu His Ala Gln Gln Leu Leu Lys Arg Pro Arg Gly
          500          505          510
Pro Ser Pro Leu Val Thr Met Thr Pro Ala Val Pro Ala Val Thr Pro
          515          520          525
Val Asp Glu Glu Ser Ser Asp Gly Glu Pro Asp Gln Glu Ala Val Gln
          530          535          540
Ser Ser Thr Tyr Lys Asp Ser Asn Thr Leu His Leu Pro Thr Glu Arg
545          550          555          560
Phe Ser Pro Val Arg Phe Ser Asp Gly Ala Ala Ser Ile Gln Ala
          565          570          575
Phe Lys Ala His Leu Glu Lys Met Gly Asn Asn Ser Ser Ile Lys Gln
          580          585          590
Leu Gln Gln Glu Cys Glu Gln Leu Gln Lys Met Tyr Gly Gly Gln Ile
          595          600          605
Asp Glu Arg Thr Leu Glu Lys Thr Gln Gln Gln His Met Leu Tyr Gln
          610          615          620
Gln Glu Gln His His Gln Ile Leu Gln Gln Gln Ile Gln Asp Ser Ile
630          635          640
Cys Pro Pro Gln Pro Ser Pro Pro Leu Gln Ala Ala Cys Glu Asn Gln
          645          650          655
Pro Ala Leu Leu Thr His Gln Leu Gln Arg Leu Arg Ile Gln Pro Ser
          660          665          670
Ser Pro Pro Pro Asn His Pro Asn Asn His Leu Phe Arg Gln Pro Ser
          675          680          685
Asn Ser Pro Pro Pro Met Ser Ser Ala Met Ile Gln Pro His Gly Ala
          690          695          700
Ala Ser Ser Ser Gln Phe Gln Gly Leu Pro Ser Arg Ser Ala Ile Phe
705          710          715          720
Gln Gln Gln Pro Glu Asn Cys Ser Ser Pro Pro Asn Val Ala Leu Thr
          725          730          735
Cys Leu Gly Met Gln Gln Pro Ala Gln Ser Gln Gln Val Thr Ile Gln
          740          745          750
Val Gln Glu Pro Val Asp Met Leu Ser Asn Met Pro Gly Thr Ala Ala
          755          760          765
Gly Ser Ser Gly Arg Gly Ile Ser Ile Ser Pro Ser Ala Gly Gln Met
          770          775          780
Gln Met Gln His Arg Thr Asn Leu Met Ala Thr Leu Ser Tyr Gly His
785          790          795          800
Arg Pro Leu Ser Lys Gln Leu Ser Ala Asp Ser Ala Glu Ala His Ser
          805          810          815
Leu Asn Val Asn Arg Phe Ser Pro Ala Asn Tyr Asp Gln Ala His Leu
          820          825          830
His Pro His Leu Phe Ser Asp Gln Ser Arg Gly Ser Pro Ser Ser Tyr
          835          840          845
Ser Pro Ser Thr Gly Val Gly Phe Ser Pro Thr Gln Ala Leu Lys Val
          850          855          860
Pro Pro Leu Asp Gln Phe Pro Thr Phe Pro Pro Ser Ala His Gln Gln
865          870          875          880
Pro Pro His Tyr Thr Thr Ser Ala Leu Gln Gln Ala Leu Leu Ser Pro
          885          890          895
Thr Pro Pro Asp Tyr Thr Arg His Gln Gln Val Pro His Ile Leu Gln

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900 905 910
 Gly Leu Leu Ser Pro Arg His Ser Leu Thr Gly His Ser Asp Ile Arg
 915 920 925
 Leu Pro Pro Thr Glu Phe Ala Gln Leu Ile Lys Arg Gln Gln Gln
 930 935 940
 Arg Gln Gln Gln Gln Gln Gln Gln Gln Gln Glu Tyr Gln Glu Leu
 945 950 955 960
 Phe Arg His Met Asn Gln Gly Asp Ala Gly Ser Leu Ala Pro Ser Leu
 965 970 975
 Gly Gly Gln Ser Met Thr Glu Arg Gln Ala Leu Ser Tyr Gln Asn Ala
 980 985 990
 Asp Ser Tyr His His Thr Ile Gln Asn Ser Asp Asp Ala Tyr Val Gln
 995 1000 1005
 Leu Asp Asn Leu Pro Gly Met Ser Leu Val Ala Gly Lys Ala Leu Ser
 1010 1015 1020
 Ser Ala Arg Met Ser Asp Ala Val Leu Ser Gln Ser Ser Leu Met Gly
 1025 1030 1035 1040
 Ser Gln Gln Phe Gln Asp Gly Glu Asn Glu Glu Cys Gly Ala Ser Leu
 1045 1050 1055
 Gly Gly His Glu His Pro Asp Leu Ser Asp Gly Ser Gln His Leu Asn
 1060 1065 1070
 Ser Ser Cys Tyr Pro Ser Thr Cys Ile Thr Asp Ile Leu Leu Ser Tyr
 1075 1080 1085
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 1090 1095 1100

<210> 6101
 <211> 1447
 <212> DNA
 <213> Homo sapiens

<400> 6101
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 120
 catctagaaa tatactccgt gatctttctt gatggccaga ctgtgtaaaa ttcatacagt
 180
 gtttactaca gggatcccca aatattgtta gttgaatgaa caaacacaca tttcaaggag
 240
 ggcactacag tgagtagatg aacagttttc tgataggaga ttgtacaagt aatgtttttca
 300
 ccagtgattt ttaggacagc agattcagat taatgcgctg ggactgaatg caaatagtaa
 360
 aattacaaat ataaagtaaa aatttggaac ctttgccaca gagaggaata ataaattgat
 420
 ttaataattt gaaagaactg taagggttag gttttgttct ttttttagt gcgactgaga
 480
 ttggagtctg tttgtagaca tatctgaaaa aagtgaaggg ggagatggaa gatggtaaat
 540
 gccaaagaaa agatggaagg ataaatcagt gtaataaaaa ggagcacttc tttttcgcca
 600
 acagaagtaa aggtaaaggt taagtgtctg agttaacgaa tggattgttg acctctgggg
 660

aggggtgctcc catcagctca gctttgtgac gacctaagaa tatcccttcc acacctttcc
 720
 tgatccaatc gttctggctg cataaaacca cctaaatcaa tcaactgtta cacttccctt
 780
 agtgctagga catattcata taactccac gtattaaatg aaaatacatc catctaaaaa
 840
 taaaacaaca agattgctgc tacaccaaga aaggatttta aaaaggcctg ttcacaagct
 900
 aagtgagggc cagaggaaaag gtgttcgttt aaactgaaat tcgagctgcg ataacacctc
 960
 ctaatgcaat caaacgctgt tgcagcacac ttcttaggag atcgggttca acggcagggg
 1020
 ttgggtaagg tgagaatctg gcttggcggc tccggccccg gccatctggt tcccttgggc
 1080
 tccggccgcc accatccact cgacggctct cggcccgaaac gcttggctgc accgcctgcc
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 1200
 ccaacgctga cgcgcgcggt ctgaggtcgc catgggaaga gcggtaggcc accctgctcc
 1260
 tctgatcacc ggaggacagg gacacattgt tcagggccat attcaaacac tgcccgagc
 1320
 acttgcgtta cgtccctttg tgaaggcagg cccttcgcgg ctccccagat cagtccagcc
 1380
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 1440
 agccgcc
 1447

<210> 6102

<211> 123

<212> PRT

<213> Homo sapiens

<400> 6102

Met	Ala	Leu	Asn	Asn	Val	Ser	Leu	Ser	Ser	Gly	Asp	Gln	Arg	Ser	Arg
1				5					10					15	
Val	Ala	Tyr	Arg	Ser	Ser	His	Gly	Asp	Leu	Arg	Pro	Arg	Ala	Ser	Ala
			20					25					30		
Leu	Ala	Met	Val	Ser	Gly	Asp	Gly	Phe	Leu	Val	Ser	Arg	Pro	Glu	Ala
		35					40					45			
Ile	His	Leu	Gly	Pro	Arg	Gln	Ala	Val	Arg	Pro	Ser	Val	Arg	Ala	Glu
	50					55					60				
Ser	Arg	Arg	Val	Asp	Gly	Gly	Gly	Arg	Ser	Pro	Arg	Glu	Pro	Asp	Gly
65				70						75				80	
Arg	Gly	Arg	Ser	Arg	Gln	Ala	Arg	Phe	Ser	Pro	Tyr	Pro	Ile	Pro	Ala
				85					90					95	
Val	Glu	Pro	Asp	Leu	Leu	Arg	Ser	Val	Leu	Gln	Gln	Arg	Leu	Ile	Ala
			100					105					110		
Leu	Gly	Gly	Val	Ile	Ala	Ala	Arg	Ile	Ser	Val					
			115					120							

<210> 6103

<211> 309

<212> DNA

<213> Homo sapiens

<400> 6103

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 120
 agaacctatg ccttgatgaa gaagattggg cagtccccag tgagagtcct gaaggagatt
 180
 gacggcttcg tctgaaccg cctgcagtac gccgtcatca gtgaggcctg gagactggcg
 240
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 300
 cggtacgcg
 309

<210> 6104

<211> 71

<212> PRT

<213> Homo sapiens

<400> 6104

Glu	Thr	Ala	Pro	Ala	Thr	Met	Asp	Arg	Thr	Tyr	Ala	Leu	Met	Lys	Lys
1				5				10				15			
Ile	Gly	Gln	Ser	Pro	Val	Arg	Val	Leu	Lys	Glu	Ile	Asp	Gly	Phe	Val
		20					25			30					
Leu	Asn	Arg	Leu	Gln	Tyr	Ala	Val	Ile	Ser	Glu	Ala	Trp	Arg	Leu	Val
	35					40				45					
Glu	Glu	Glu	Ile	Val	Ser	Pro	Ser	Asp	Leu	Asp	Leu	Val	Met	Ser	Asp
50					55					60					
Gly	Leu	Gly	Met	Arg	Tyr	Ala									
65					70										

<210> 6105

<211> 1846

<212> DNA

<213> Homo sapiens

<400> 6105

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 120
 gggatgaagt ggtgtctccc cttccatctg ctctgcaggg gtccctcagg ctccctatca
 180
 gccctccag ctgcctcagt tatctctgca ccccatctt cctcctccc acatcgcaaa
 240
 cgtcgcagga cttccagcaa gtcggaggca ggggctaggg gtggaggcca gggttccaag
 300
 gaaaagggcc gagggagttg gggaggccgc caccaccacc accaccact gcctgcagca
 360
 ggcttcaaaa agcaacagcg caagttccag tatgggaatt attgcaaata ctatgggtac
 420

cgcaatcctt cctgtgagga tgggcgcctt cgggtgttga agcctgagtg gtttcggggc
480
cgggacgtcc tagatctggg ctgcaatgtg ggccatctga ccctgagcat tgcttgcaag
540
tggggcccggt cccgcatggt gggcctggat atcgattccc ggctcatcca ttctgcccgc
600
caaaacatcc gacactacct ttccgaggag ctgctgtctc caccacagac tttggaaggg
660
gacccggggg cagaggggtga ggaagggacc accaccgttc gaaagaggag ctgcttccca
720
gcctcgctga ctgccagccg ggggtccatc gctgcccccc aagtgcctt ggatggagcg
780
gacacatcag tcttcccca caatgttgtc ttcgtcacgg gtaattatgt gctggatcga
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aagtgggtgc atctgaactg gggagacgag ggctgaagc gcatgtttcg ccgatctac
960
cggcacctac gccctggggg catcctggtc ctagagcccc aaccctggtc gtcgtatggc
1020
aagagaaaga ctcttacaga aacgatctac aagaactact accgaatcca attgaagcca
1080
gagcagttca gttcctacct gacatcccca gacgtgggct tctccagcta tgagcttgtg
1140
gccacacccc acaacacctc taaaggcttc cagcgtctctg tgtacctgtt ccacaaggcc
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cgatcccca gccactaagt gggcccctaa acagaaagtg tgaagaggct gccctcgctg
1260
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1320
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1380
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1620
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1680
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1740
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1800
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa
1846

<210> 6106

<211> 405

<212> PRT

<213> Homo sapiens

<400> 6106

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      20           25           30
Asn Ser Thr Gln Pro Ser Thr Ala Gly Met Lys Trp Cys Leu Pro Phe
      35           40           45
His Leu Leu Cys Arg Gly Pro Ser Gly Ser Leu Ser Ala Pro Pro Ala
      50           55           60
Ala Ser Val Ile Ser Ala Pro Pro Ser Ser Ser Arg His Arg Lys
      65           70           75           80
Arg Arg Arg Thr Ser Ser Lys Ser Glu Ala Gly Ala Arg Gly Gly Gly
      85           90           95
Gln Gly Ser Lys Glu Lys Gly Arg Gly Ser Trp Gly Gly Arg His His
      100          105          110
His His His Pro Leu Pro Ala Ala Gly Phe Lys Lys Gln Gln Arg Lys
      115          120          125
Phe Gln Tyr Gly Asn Tyr Cys Lys Tyr Tyr Gly Tyr Arg Asn Pro Ser
      130          135          140
Cys Glu Asp Gly Arg Leu Arg Val Leu Lys Pro Glu Trp Phe Arg Gly
      145          150          155          160
Arg Asp Val Leu Asp Leu Gly Cys Asn Val Gly His Leu Thr Leu Ser
      165          170          175
Ile Ala Cys Lys Trp Gly Pro Ser Arg Met Val Gly Leu Asp Ile Asp
      180          185          190
Ser Arg Leu Ile His Ser Ala Arg Gln Asn Ile Arg His Tyr Leu Ser
      195          200          205
Glu Glu Leu Arg Leu Pro Pro Gln Thr Leu Glu Gly Asp Pro Gly Ala
      210          215          220
Glu Gly Glu Glu Gly Thr Thr Thr Val Arg Lys Arg Ser Cys Phe Pro
      225          230          235          240
Ala Ser Leu Thr Ala Ser Arg Gly Pro Ile Ala Ala Pro Gln Val Pro
      245          250          255
Leu Asp Gly Ala Asp Thr Ser Val Phe Pro Asn Asn Val Val Phe Val
      260          265          270
Thr Gly Asn Tyr Val Leu Asp Arg Asp Asp Leu Val Glu Ala Gln Thr
      275          280          285
Pro Glu Tyr Asp Val Val Leu Cys Leu Ser Leu Thr Lys Trp Val His
      290          295          300
Leu Asn Trp Gly Asp Glu Gly Leu Lys Arg Met Phe Arg Arg Ile Tyr
      305          310          315          320
Arg His Leu Arg Pro Gly Gly Ile Leu Val Leu Glu Pro Gln Pro Trp
      325          330          335
Ser Ser Tyr Gly Lys Arg Lys Thr Leu Thr Glu Thr Ile Tyr Lys Asn
      340          345          350
Tyr Tyr Arg Ile Gln Leu Lys Pro Glu Gln Phe Ser Ser Tyr Leu Thr
      355          360          365
Ser Pro Asp Val Gly Phe Ser Ser Tyr Glu Leu Val Ala Thr Pro His
      370          375          380
Asn Thr Ser Lys Gly Phe Gln Arg Pro Val Tyr Leu Phe His Lys Ala
      385          390          395          400
Arg Ser Pro Ser His
      405

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<210> 6107
 <211> 896
 <212> DNA
 <213> Homo sapiens

<400> 6107
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 120
 tggatgtcaa ggagatgctc aaggctgggc tcaacaccac cccagctcc agcctcccca
 180
 gtggagtctc cccgacctc accgcctct tcagccttct catcattacc ctctgatgga
 240
 tgggggagtt cagttggctc ggggttgctt tggcctgcca ccaggtggtc cacatgcccc
 300
 aggtggagga cggatgtgtc gctgctgac acaatagcgc ccaggagctg gttgctaccg
 360
 ctgtctgcta cgtaggtaga gagccaagct aggaccaagg ctagaatcag caccaccaca
 420
 cctgccacca ccatcacctc attaccacaca ccctcaatga gggtgacatc agtgaccccc
 480
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 540
 ggcagccctt cggttcgggt gggcccagac ccagtccaa cgccgagga ataggaccat
 600
 ccaaaagcgg aaccttcgcc tcagaaaaag ggtgcgggac cctcctcac cgtgcgggtca
 660
 cggtagcgac agggtagatc acaggctgag ggacagagca aagaccctg aggccggaca
 720
 cctggggctc tgccgggccc ctccccacga gagttccctg tgtctgtgcc aatcgttttc
 780
 gtctttcttt gccgcagttt cttttcctgt aaatcatggt taatgacatt aaccttctta
 840
 ccatcagggg ttagttgttg ttgtgataaa taattactac cgttattaag caattg
 896

<210> 6108
 <211> 124
 <212> PRT
 <213> Homo sapiens

<400> 6108
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 Gly Leu Ser Ser Asp Leu Arg Gly Ala Ser Gly Leu Leu Leu Pro Ala
 20 25 30
 Pro Ala Cys Leu Leu Gly Arg Pro Trp Met Ser Arg Arg Cys Ser Arg
 35 40 45
 Leu Gly Ser Thr Pro Pro Pro Ala Pro Ala Ser Pro Val Glu Ser Pro
 50 55 60
 Arg Pro Ser Pro Ala Ser Ser Ala Phe Ser Ser Leu Pro Ser Asp Gly
 65 70 75 80
 Trp Gly Ser Ser Val Gly Ser Gly Leu Pro Trp Pro Ala Thr Arg Trp

	85		90		95										
Ser	Thr	Cys	Pro	Arg	Trp	Arg	Thr	Asp	Val	Ser	Pro	Ala	Asp	Thr	Ile
	100					105							110		
Ala	Pro	Arg	Ser	Trp	Leu	Leu	Pro	Leu	Ser	Ala	Thr				
	115					120									

<210> 6109

<211> 2087

<212> DNA

<213> Homo sapiens

<400> 6109

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gctaccagaa gcatcatggg gccctgggga gagccagagc tcctgggtgtg gcgccccgag
120

ggtagcttca gaggctccag tgcctgtggg gctggagggtg aagttggggg ccctgggtgtc
180

gctgctgttc tcaccctcct ctgcagcctg gtgcccattc gtgtgctgcg ccggccagga
240

gctaaccatg aaggctcagc ttcccgccag aaagccctga gcctagtaag ctgtttcgcg
300

gggggctgtc ttttgccac ttgtctcctg gacctgctgc ctgactacct ggctgccata
360

gatgaggccc tggcagcctt gcacgtgacg ctccagttcc cactgcaaga gttcatcctg
420

gccatgggct tcttcctggg cctggtgatg gagcagatca cactggctta caaggagcag
480

tcagggccgt cacctctgga ggaaacaagg gctctgctgg gaacagtga tgggtgggccg
540

cagcattggc atgatgggcc aggggtccca caggcgagtg gagccccagc aacccccctca
600

gccttgctg cctgtgtact ggtgtttctc ctggccctcc actccgtgtt cgaggggctg
660

gcggtagggc tgcagcgaga ccgggctcgg gccatggagc tgtgcctggc tttgctgctc
720

cacaagggca tcctggctgt cagcctgtcc ctgcggctgt tgcagagcca ccttagggca
780

cagggtgggtg ctggctgtgg gatcctcttc tcatgcatga cacctctagg catcgggctg
840

ggtgcagctc tggcagagtc ggcaggacct ctgcaccagc tggcccagtc tgtgctagag
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ggcatggcag ctggcacctt tctctatata acctttctgg aaatcctgcc ccaggagctg
960

gccagttctg agcaaaggat cctcaaggtc attctgctcc tagcaggctt tgcctgctc
1020

actggcctgc tcttcatcca aatctagggg gcttcaagag aggggcaggg gagattgatg
1080

atcagtggtc cctgttctcc cttccctccc ccagttgtgg ggaataggaa ggaaagggga
1140

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ctgactaatg agagggaagt gggcagacaa gaggctggcc ccagtcccaa ggaacaagag
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 1860
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 1920
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 2040
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 2087

<210> 6110

<211> 323

<212> PRT

<213> Homo sapiens

<400> 6110

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Ser	Phe	Arg	Ala	Ser	Ser	Ala	Cys	Gly	Ala	Gly	Gly	Glu	Val	Gly	Gly
			20					25				30			
Pro	Gly	Ala	Ala	Ala	Gly	Leu	Thr	Leu	Leu	Cys	Ser	Leu	Val	Pro	Ile
			35				40					45			
Cys	Val	Leu	Arg	Arg	Pro	Gly	Ala	Asn	His	Glu	Gly	Ser	Ala	Ser	Arg
			50			55				60					
Gln	Lys	Ala	Leu	Ser	Leu	Val	Ser	Cys	Phe	Ala	Gly	Gly	Val	Phe	Leu
65					70					75				80	
Ala	Thr	Cys	Leu	Leu	Asp	Leu	Leu	Pro	Asp	Tyr	Leu	Ala	Ala	Ile	Asp
			85					90						95	
Glu	Ala	Leu	Ala	Ala	Leu	His	Val	Thr	Leu	Gln	Phe	Pro	Leu	Gln	Glu
			100					105					110		
Phe	Ile	Leu	Ala	Met	Gly	Phe	Phe	Leu	Val	Leu	Val	Met	Glu	Gln	Ile
			115				120					125			
Thr	Leu	Ala	Tyr	Lys	Glu	Gln	Ser	Gly	Pro	Ser	Pro	Leu	Glu	Glu	Thr
			130			135					140				
Arg	Ala	Leu	Leu	Gly	Thr	Val	Asn	Gly	Gly	Pro	Gln	His	Trp	His	Asp

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145          150          155          160
Gly Pro Gly Val Pro Gln Ala Ser Gly Ala Pro Ala Thr Pro Ser Ala
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Leu Arg Ala Cys Val Leu Val Phe Ser Leu Ala Leu His Ser Val Phe
          180          185          190
Glu Gly Leu Ala Val Gly Leu Gln Arg Asp Arg Ala Arg Ala Met Glu
          195          200          205
Leu Cys Leu Ala Leu Leu Leu His Lys Gly Ile Leu Ala Val Ser Leu
          210          215          220
Ser Leu Arg Leu Leu Gln Ser His Leu Arg Ala Gln Val Val Ala Gly
225          230          235          240
Cys Gly Ile Leu Phe Ser Cys Met Thr Pro Leu Gly Ile Gly Leu Gly
          245          250          255
Ala Ala Leu Ala Glu Ser Ala Gly Pro Leu His Gln Leu Ala Gln Ser
          260          265          270
Val Leu Glu Gly Met Ala Ala Gly Thr Phe Leu Tyr Ile Thr Phe Leu
          275          280          285
Glu Ile Leu Pro Gln Glu Leu Ala Ser Ser Glu Gln Arg Ile Leu Lys
          290          295          300
Val Ile Leu Leu Leu Ala Gly Phe Ala Leu Leu Thr Gly Leu Leu Phe
305          310          315          320
Ile Gln Ile

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<210> 6111

<211> 1706

<212> DNA

<213> Homo sapiens

<400> 6111

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nnagatctgc ctgcctctct gccccaaag tgggtgggatt acaggtgtga gccactgctc
60
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120
taacttgcca tttgttcatt cttgtctttg ttgtttttca tataatagaa atccccccaa
180
tgttttatat cttttatgtc tttattttgt ttgttttgt ttttgagatg gagtttcctt
240
cttgttgccc aggctggagt gnagtggcac agtctcggct cactgcaacc tccacttctt
300
gggttcaagc agttctcgtg ccgcagcctc ccaagtagct gggactacag gcatgcgcca
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420
tggtctcaaa ctctgacct caggcgatcc accacctca gcgtcccaaa gtgctgggat
480
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540
tggaaggag agttgactga agttggccca caggattgtg agctgggcag tgccttcagt
600
aaggttgcc accttgggac gcccagttt actggggtgt cttgcggagt gcagaaggct
660
ttctggcagc tgctggggtt tggccagacc ctgcctcccc tcccgcgggc caaccctag
720

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tcccccttccgtgtccacttgcattcaggggtggctgctgttctgagaacattagaactg
 780
 ggaagagagatggagtcacatggatttttggggcatta ttctgaactt tcttatccaa
 840
 gttagtcccccttattccac tgtggcattg ccgttctaag cagttacctg atgctgctg
 900
 ctgaagagct gctcacagga ggcggcgggcg gccctggcac tgcccccttgct attaggtctt
 960
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 1020
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 1080
 aatcaccccca tgtaggtgta cattgtgaca aagtgcactt gaccactaag gggccccctt
 1140
 ggtgacccca gcacattcac agcagtgtta aaatggcctg cattttggag atgctggctg
 1200
 gcctttcagt gcctcccagg aagacacatg gcctttccct cttcagatgc ctgaaggag
 1260
 tgctttgagg caggtgatgt gctgggagtg tggcgggcct ccctctggcc ccggggccct
 1320
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 1380
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 1440
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 1500
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 1560
 gtgggtggag actttattta ccaagatgtt tactcttcc tccccctcc attttgagga
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 1680
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 1706

<210> 6112

<211> 110

<212> PRT

<213> Homo sapiens

<400> 6112

Met	Ser	Leu	Phe	Cys	Phe	Val	Leu	Phe	Leu	Arg	Trp	Ser	Phe	Pro	Leu
1				5					10					15	
Val	Ala	Gln	Ala	Gly	Val	Xaa	Trp	His	Ser	Leu	Gly	Ser	Leu	Gln	Pro
			20					25					30		
Pro	Leu	Pro	Gly	Phe	Lys	Gln	Phe	Ser	Cys	Arg	Ser	Leu	Pro	Ser	Ser
		35					40					45			
Trp	Asp	Tyr	Arg	His	Ala	Pro	Pro	Arg	Gln	Ala	Asn	Phe	Cys	Ile	Phe
	50					55				60					
Ser	Arg	Asp	Gly	Val	Ser	Pro	Cys	Trp	Pro	Gly	Trp	Ser	Gln	Thr	Pro
65					70					75				80	
Asp	Leu	Arg	Arg	Ser	Thr	His	Leu	Ser	Val	Pro	Lys	Cys	Trp	Asp	Tyr
				85				90					95		
Arg	Arg	Glu	Pro	Pro	His	Leu	Ala	Tyr	Glu	Trp	Ser	Phe	Asn		

100

105

110

<210> 6113
<211> 1095
<212> DNA
<213> Homo sapiens

<400> 6113
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ggtgacgcac tttaaggcgg cagcgtaagt gcgtgacgct cgtcagtggc ttcagttcac
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acgtggcgcc agcggaggca ggttgatgtg tttgtgcttc cttctacagc caatatgaaa
180
aggcctagta agtggggtcg ggaggcgggc gtggaggggac ccacgtctgg aagttgctgc
240
agccaccacg acgctcttct acggctacgg ctttgtctct gctgggatgg gggggggagc
300
atacgcgtag gccttgcccc tatttctctg tagaaccgag agttggaagt ccctacggcg
360
atcatgttaa ccgcgcgggc tcattctgct gaacgaagcc gggcagaggg tggggaagac
420
taggctagat ttctgtaagg aagcagcgtc tgagccaggt ttgaggccca atattttctt
480
tccgtggcca cgtgcagact ggcccagggt agagctgaga atcgctccc agactcagtg
540
ttcctctcct gccttatgat tcgtgctggt tgacacgaag tggttgtcgt tttgtgtctc
600
atacgtgtgt gtgtatgata ccatttctaat attgtgaggg taagtgcagg gaattttgac
660
tcatttctgg atctactgaa ttaattcttc tgggatttga aagtagcacg tatgtttgca
720
ttaggcattt cgcattagac ttaacgttag gtttggttag caataacaca agaaaaggat
780
ataactccat agtgcgtaa cccagaacta atcatttggg ttaacagatt tgtgatgtgt
840
ttctttgtag agttaaagaa agcaagtaaa cgcataacgt gccataagcg gtataaaatc
900
caaaaaaagg ttcgagaaca tcatacgaata ttaagaaagg aggctaaaaa gcgggggtcac
960
aagaagccta ggaaagaccc aggagttcca aacagtgtct cctttaagga ggctcttctt
1020
gaggaagctg agctaaggaa acagaggctt gaagaactaa aacagcagca gaaacttgac
1080
aggcagaagg aacta
1095

<210> 6114
<211> 87
<212> PRT
<213> Homo sapiens

<400> 6114
Met Cys Phe Phe Val Glu Leu Lys Lys Ala Ser Lys Arg Met Thr Cys

```

      1           5           10           15
His Lys Arg Tyr Lys Ile Gln Lys Lys Val Arg Glu His His Arg Lys
      20           25           30
Leu Arg Lys Glu Ala Lys Lys Arg Gly His Lys Lys Pro Arg Lys Asp
      35           40           45
Pro Gly Val Pro Asn Ser Ala Pro Phe Lys Glu Ala Leu Leu Glu Glu
      50           55           60
Ala Glu Leu Arg Lys Gln Arg Leu Glu Glu Leu Lys Gln Gln Gln Lys
      65           70           75           80
Leu Asp Arg Gln Lys Glu Leu
      85

```

<210> 6115

<211> 411

<212> DNA

<213> Homo sapiens

<400> 6115

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gcgcgcctgg ccccgccagg gcctaagttc cctgcactcg cttccccgcc tgtcgccgcc
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gccgcgcccc gcagccctcc ttctcgtggg cgctggggaa gaaactcgtc ggcggttcta
120
actgtggcgt cccagggcgg tggagggagc aacttcgggg gcacgtcctc gtaaatcccg
180
tggaggacac tgacctgta cccaccctc gaggccagaa gtcggttcct ttgggggaac
240
tgaggggcga gagcactcgc cccctgact tgcaaagttg gcgtctttac ttggcctcgg
300
ggattctgcy catggcgtgt ctccaggctg ctgatgggca agacagatgt gccaggtcca
360
gaatgaactt gagaagagtt tgtagccatt cctgaatcac cttatactag t
411

```

<210> 6116

<211> 129

<212> PRT

<213> Homo sapiens

<400> 6116

```

Met Ala Thr Asn Ser Ser Gln Val His Ser Gly Pro Gly Thr Ser Val
      1           5           10           15
Leu Pro Ile Ser Ser Leu Glu Thr Arg His Ala Gln Asn Pro Gly Gly
      20           25           30
Gln Val Lys Thr Pro Thr Leu Gln Val Arg Gly Ala Ser Ala Leu Ala
      35           40           45
Pro Gln Phe Pro Gln Arg Asn Arg Leu Leu Ala Ser Arg Val Gly Tyr
      50           55           60
Arg Val Ser Val Leu His Gly Ile Tyr Glu Asp Val Pro Pro Lys Leu
      65           70           75           80
Leu Pro Pro Pro Pro Trp Asp Ala Thr Val Arg Pro Ala Asp Glu Phe
      85           90           95
Leu Pro Gln Arg Pro Arg Glu Gly Gly Leu Arg Ala Ala Ala Ala Ala
      100          105          110
Thr Gly Gly Glu Ala Ser Ala Gly Asn Leu Gly Pro Gly Gly Ala Arg

```

115 120 125
Arg

<210> 6117
<211> 962
<212> DNA
<213> Homo sapiens

<400> 6117
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60
gtggaagacg gagaggaaac ctgcgccctg gcctctcact ccgggagctc aggctccaag
120
tcgggaggcg acaagatggt ctccctcaag aagtggaaac cggtggccat gtggagctgg
180
gacgtggagt gcgatacgtg cgccatctgc agggctccagg tgatggatgc ctgtcttaga
240
tgtcaagctg aaaacaaaca agaggactgt gttgtggtct ggggagaatg taatcattcc
300
ttccacaact gctgcatgtc cctgtgggtg aaacagaaca atcgctgccc tctctgccag
360
caggactggg tgggccaaag aatcggcaaa tgagagtggg tagaaggctt cttagcgcag
420
ttgttcagag ccctgggtgga tcttgtaatc cagtgcccta caaaggctag aacactacag
480
gggatgaatt cttcaaatag gagccgatgg atctgtggtc ctttgggact catcaaagcc
540
ttggtttagc attttgtcag ttttatcttc agaaattctc tgcgattaag aagataattt
600
attaaagggtg gtccttccta cctctgtggt gtgtgtcgcg cacacagctt agaagtgcta
660
taaaaaagga aagagctcca aattgaatca cttttataat ttaccattt ctatacaaca
720
ggcagtgga gcatgttcag agaacttttt gcatgcttat ggttgatcag ttaaaaaaga
780
atgttacagt aacaaataaa gtgcagttta aaaccaact cttactctta atttgttctt
840
aatacgtatt tttggcaggg agaggggaacg gtccatgaaa tctttatgtg atataaggat
900
tttaagtttg ggccagtga cagggtaaat aaaatttaac ttttgagcat aaaaaaaaaa
960
aa
962

<210> 6118
<211> 113
<212> PRT
<213> Homo sapiens

<400> 6118
Met Ala Asp Val Glu Asp Gly Glu Glu Thr Cys Ala Leu Ala Ser His
1 5 10 15
Ser Gly Ser Ser Gly Ser Lys Ser Gly Gly Asp Lys Met Phe Ser Leu

```

      20      25      30
Lys Lys Trp Asn Ala Val Ala Met Trp Ser Trp Asp Val Glu Cys Asp
      35      40      45
Thr Cys Ala Ile Cys Arg Val Gln Val Met Asp Ala Cys Leu Arg Cys
      50      55      60
Gln Ala Glu Asn Lys Gln Glu Asp Cys Val Val Val Trp Gly Glu Cys
65      70      75      80
Asn His Ser Phe His Asn Cys Cys Met Ser Leu Trp Val Lys Gln Asn
      85      90      95
Asn Arg Cys Pro Leu Cys Gln Gln Asp Trp Val Val Gln Arg Ile Gly
      100      105      110
Lys

```

<210> 6119
 <211> 375
 <212> DNA
 <213> Homo sapiens

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<400> 6119
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ccccacacc ccacacggac tgcacggaaa tatcacagta accatctctc agtcacagcg
120
tggccccaca gaactcatgc ctgcttgctt taaaccacc aatgaaaact ccccatggga
180
aacctgcttg gataatactt tggaccccaa taaatgcttt aatcccacaa gtcctctgtc
240
tctgcctctc tcttgccctt acccactggg tgagcatgtg tgtcccaaac ggccctgcaa
300
gggtgtgtgc cctgttcttt ctgggctctg tcaaggaatc aaactgettc tgttatgtga
360
tgtgtcatgt tgtgc
375

```

<210> 6120
 <211> 118
 <212> PRT
 <213> Homo sapiens

```

<400> 6120
Met Gly Lys Leu Asp Thr Ala Pro Trp Thr Cys Pro Thr Asp Pro His
1      5      10      15
Thr Pro His Gly Leu His Gly Asn Ile Thr Val Thr Ile Ser Gln Ser
      20      25      30
Gln Arg Gly Pro Thr Glu Leu Met Pro Ala Cys Phe Lys Pro Thr Asn
      35      40      45
Glu Asn Ser Pro Trp Glu Thr Cys Leu Asp Asn Thr Leu Asp Pro Asn
      50      55      60
Lys Cys Phe Asn Pro Thr Ser Pro Leu Ser Leu Pro Leu Ser Cys Pro
65      70      75      80
Tyr Pro Leu Val Glu His Val Cys Pro Lys Arg Pro Cys Lys Val Cys
      85      90      95
Cys Pro Val Leu Ser Gly Leu Cys Gln Gly Ile Lys Leu Leu Leu Leu

```

100
Cys Asp Val Ser Cys Cys
115

105

110

<210> 6121
<211> 1039
<212> DNA
<213> Homo sapiens

<400> 6121
gacggaacgg cgggtggtggc ccgcggaaccg gacggggcac tatgaacgaa gaggagcagt
60
ttgtaaacad tgatttgaat gatgacaaca ttgacagtgt ttgtaaactg ggaacagaca
120
aagaacact ctccttctgc cacatttgtt ttgagctaaa tattgagggg gtaccaaagt
180
ctgatctctt gcacacaaaa tcattaaggg gccataaaga ctgctttgaa aaataccatt
240
taattgcaaa ccagggttgt cctcgatcta agctttcaaa aagtacttat gaagaagtta
300
aaaccatttt gagtaagaag ataaactgga ttgtgcagta tgcacaaaat aaggatctgg
360
attcagattc tgaatgttct aaaaagcccc agcatcatct gtttaatttc aggcataagc
420
cagaagaaaa attactccca cagtttgagt cccaagtacc aaaatattct gcaaaatgga
480
tagatggaag tgcaggtggc atctctaact gtacacaaag aattttggag cagagggaaa
540
atacagactt tggactttct atgttacaag attcaggtgc cactttatgt cgtaacagtg
600
tattgtggcc tcatagtcac aaccaggcac agaaaaaaga agagacaatc tctagtccag
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720
taactacca agtgaagaa aaagattctt tggcctcaca gctccatgtc cgccacgttg
780
ccatcgaaca gcttctgaag aactgttcta agttaccatg tctgcaagta gggcgaacag
840
gaatgaagtc gcacctaccc ataaacaact gacctaaaca gacttacttc gtatgccctg
900
ccctttattg gtctcccaga catgcaaact ttgaagaagt ttgaagaaag ttgtggtccg
960
tttttttatg gtcattaaat ttgccaaaca taaggcagta tttaacatct ttgtcaaata
1020
aagcagatca ttatactct
1039

<210> 6122
<211> 221
<212> PRT
<213> Homo sapiens

<400> 6122
Met Asn Glu Glu Glu Gln Phe Val Asn Ile Asp Leu Asn Asp Asp Asn .

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Ile Cys Ser Val Cys Lys Leu Gly Thr Asp Lys Glu Thr Leu Ser Phe			
20	25	30	
Cys His Ile Cys Phe Glu Leu Asn Ile Glu Gly Val Pro Lys Ser Asp			
35	40	45	
Leu Leu His Thr Lys Ser Leu Arg Gly His Lys Asp Cys Phe Glu Lys			
50	55	60	
Tyr His Leu Ile Ala Asn Gln Gly Cys Pro Arg Ser Lys Leu Ser Lys			
65	70	75	80
Ser Thr Tyr Glu Glu Val Lys Thr Ile Leu Ser Lys Lys Ile Asn Trp			
85	90	95	
Ile Val Gln Tyr Ala Gln Asn Lys Asp Leu Asp Ser Asp Ser Glu Cys			
100	105	110	
Ser Lys Lys Pro Gln His His Leu Phe Asn Phe Arg His Lys Pro Glu			
115	120	125	
Glu Lys Leu Leu Pro Gln Phe Glu Ser Gln Val Pro Lys Tyr Ser Ala			
130	135	140	
Lys Trp Ile Asp Gly Ser Ala Gly Gly Ile Ser Asn Cys Thr Gln Arg			
145	150	155	160
Ile Leu Glu Gln Arg Glu Asn Thr Asp Phe Gly Leu Ser Met Leu Gln			
165	170	175	
Asp Ser Gly Ala Thr Leu Cys Arg Asn Ser Val Leu Trp Pro His Ser			
180	185	190	
His Asn Gln Ala Gln Lys Lys Glu Glu Thr Ile Ser Ser Pro Glu Ala			
195	200	205	
Asn Val Gln Thr Gln His Pro His Tyr Ser Arg Glu Glu			
210	215	220	

<210> 6123

<211> 900

<212> DNA

<213> Homo sapiens

<400> 6123

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ggaggcggag gttgcggtga gctgagatcg caccattgca ctccagcctg ggcaacaaga
120
gcgaaacaac aagagaaaaa aaaggaagct gccctctgcc caaaaccac gtcgaggtcc
180
ccaaacctgg gacccttagg tcttttctca cttagcgtgc ccaaccttct cctggcagga
240
aacaagcctc caggtctgct tccccgaaa ggactataca tggcaaata cttaaagctc
300
ctgagacacc atctccagat tcccatccac ttcccgaagg atttcttgtc tgtgatgctt
360
gaaaaaggaa gtttgtctgc catgcgtttc ctaccgccg tgaacttga gcatccagag
420
atgctggaga aagcgtcccg ggagctgtgg atgcgcgtct ggtcaagggt gagtgtggg
480
ctctgggaat cctctgggag gaccttgat gactttctga ccttcccag gcacgttttc
540
agggtcatga tctgcccc gcccgggga tctactgtcc tcccagtcac accctctcc
600

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ccgcaccgcc ttctgtctgt cttctcttct tcccagaatg aagacatcac cgagccgcag
 660
 agcatcctgg cggctgcaga gaaggtggt atgtctgcag aacaagccca gggacttctg
 720
 gaaaagatcg caacgccaaa ggtgaagaac cagctcaagg agaccactga ggcagcctgc
 780
 agatacggag cctttgggct gcccatcacc gtggcccatg tggatggcca aacccacatg
 840
 ttatttggt ctgaccggat ggagctgctg gcgcacctgc tgggagagaa gtggatgggc
 900

<210> 6124

<211> 300

<212> PRT

<213> Homo sapiens

<400> 6124

Xaa	His	Ala	Cys	Ile	Pro	Gln	Leu	Leu	Gly	Arg	Leu	Arg	Arg	Glu	Asn
1				5					10					15	
Arg	Leu	Asn	Pro	Gly	Gly	Gly	Gly	Cys	Gly	Glu	Leu	Arg	Ser	His	His
		20						25					30		
Cys	Thr	Pro	Ala	Trp	Ala	Thr	Arg	Ala	Lys	Gln	Gln	Glu	Lys	Lys	Lys
		35					40					45			
Glu	Ala	Ala	Leu	Cys	Pro	Lys	Pro	Thr	Ser	Arg	Ser	Pro	Asn	Leu	Gly
	50					55					60				
Pro	Leu	Gly	Leu	Phe	Ser	Leu	Ser	Val	Pro	Asn	Leu	Leu	Leu	Ala	Gly
65				70						75				80	
Asn	Lys	Pro	Pro	Gly	Leu	Leu	Pro	Arg	Lys	Gly	Leu	Tyr	Met	Ala	Asn
				85					90					95	
Asp	Leu	Lys	Leu	Leu	Arg	His	His	Leu	Gln	Ile	Pro	Ile	His	Phe	Pro
		100						105					110		
Lys	Asp	Phe	Leu	Ser	Val	Met	Leu	Glu	Lys	Gly	Ser	Leu	Ser	Ala	Met
	115						120					125			
Arg	Phe	Leu	Thr	Ala	Val	Asn	Leu	Glu	His	Pro	Glu	Met	Leu	Glu	Lys
	130					135					140				
Ala	Ser	Arg	Glu	Leu	Trp	Met	Arg	Val	Trp	Ser	Arg	Val	Ser	Val	Gly
145				150						155				160	
Leu	Trp	Glu	Ser	Ser	Gly	Arg	Thr	Leu	Asp	Asp	Phe	Leu	Thr	Phe	Pro
				165					170					175	
Arg	His	Val	Phe	Arg	Val	Met	Ile	Leu	Pro	Pro	Pro	Gly	Gly	Ser	Thr
		180						185					190		
Val	Leu	Pro	Val	Thr	Pro	Leu	Ser	Pro	His	Arg	Leu	Pro	Ala	Val	Phe
	195						200					205			
Ser	Ser	Ser	Gln	Asn	Glu	Asp	Ile	Thr	Glu	Pro	Gln	Ser	Ile	Leu	Ala
	210					215					220				
Ala	Ala	Glu	Lys	Ala	Gly	Met	Ser	Ala	Glu	Gln	Ala	Gln	Gly	Leu	Leu
225				230						235				240	
Glu	Lys	Ile	Ala	Thr	Pro	Lys	Val	Lys	Asn	Gln	Leu	Lys	Glu	Thr	Thr
			245						250					255	
Glu	Ala	Ala	Cys	Arg	Tyr	Gly	Ala	Phe	Gly	Leu	Pro	Ile	Thr	Val	Ala
		260						265					270		
His	Val	Asp	Gly	Gln	Thr	His	Met	Leu	Phe	Gly	Ser	Asp	Arg	Met	Glu
	275						280					285			
Leu	Leu	Ala	His	Leu	Leu	Gly	Glu	Lys	Trp	Met	Gly				

290 295 300

<210> 6125
 <211> 468
 <212> DNA
 <213> Homo sapiens

<400> 6125
 nctacagtca ctcaggagaa gtcccgcatg gaggcttctt acttggctga caagaaaaag
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 atgaaacagg acttagagga tgccagtaac aaggcggagg aggagagggc cgcctggag
 120
 ggagaattga aggggctgca ggagcaaata gcagaaacca aagcccggct tatcacgcag
 180
 cagcatgatc gggcccaaga gcagagtgc catgccttga tgctgcgtga gctccagaag
 240
 ctgctgcagg aggagaggac ccagcgccag gacttggagc ttaggttaga agagacccga
 300
 gaagccttgg caggacgagc atatgcagct gaacagatgg aaggatttga actgcagacc
 360
 aagcagctga cccgtgaggt ggaggagctg aaaagtgaac tgcaggccat tcgagatgag
 420
 aagaatcagc cagacccccg gctgcaagaa cttcaggaag aggccgcc
 468

<210> 6126
 <211> 156
 <212> PRT
 <213> Homo sapiens

<400> 6126

Xaa	Thr	Val	Thr	Gln	Glu	Lys	Ser	Arg	Met	Glu	Ala	Ser	Tyr	Leu	Ala
1				5					10					15	
Asp	Lys	Lys	Lys	Met	Lys	Gln	Asp	Leu	Glu	Asp	Ala	Ser	Asn	Lys	Ala
			20					25					30		
Glu	Glu	Glu	Arg	Ala	Arg	Leu	Glu	Gly	Glu	Leu	Lys	Gly	Leu	Gln	Glu
			35				40					45			
Gln	Ile	Ala	Glu	Thr	Lys	Ala	Arg	Leu	Ile	Thr	Gln	Gln	His	Asp	Arg
		50				55					60				
Ala	Gln	Glu	Gln	Ser	Asp	His	Ala	Leu	Met	Leu	Arg	Glu	Leu	Gln	Lys
65					70					75				80	
Leu	Leu	Gln	Glu	Glu	Arg	Thr	Gln	Arg	Gln	Asp	Leu	Glu	Leu	Arg	Leu
				85					90					95	
Glu	Glu	Thr	Arg	Glu	Ala	Leu	Ala	Gly	Arg	Ala	Tyr	Ala	Ala	Glu	Gln
			100					105					110		
Met	Glu	Gly	Phe	Glu	Leu	Gln	Thr	Lys	Gln	Leu	Thr	Arg	Glu	Val	Glu
			115				120					125			
Glu	Leu	Lys	Ser	Glu	Leu	Gln	Ala	Ile	Arg	Asp	Glu	Lys	Asn	Gln	Pro
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<212> DNA

<213> Homo sapiens

<400> 6127

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<211> 530

<212> PRT

<213> Homo sapiens

<400> 6128

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 Lys Gly Val Leu Ser Pro Phe Val Leu Gln Glu Ile Val Met Glu Thr
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 Val Asn Ala Ile Arg Ser Ala Arg Ser Ala Phe Cys Leu Thr Pro Met
 485 490 495
 Gly Met Met Gln Phe Asn Asp Ile Leu Gln Asn Leu Lys Arg Ser Lys
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<210> 6129

<211> 2012

<212> DNA

<213> Homo sapiens

<400> 6129

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<211> 364

<212> PRT

<213> Homo sapiens

<400> 6130

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Thr Tyr Ile Phe Val Tyr Glu Asn Pro Ile Ser Leu Leu Cys Gly Ala
      65          70          75          80
Ile Ile Ile Trp Arg Phe Ala Gly Asn Phe Glu Arg Thr Val Gly Thr
      85          90          95
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<211> 3526

<212> DNA

<213> Homo sapiens

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<211> 167

<212> PRT

<213> Homo sapiens

<400> 6132

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Leu	Lys	Ile	Thr	Gln	Lys	Glu	Ser	Arg	Lys	Ser	Lys	Ser	Pro	Pro	Lys
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<212> DNA

<213> Homo sapiens

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<210> 6134

<211> 595

<212> PRT

<213> Homo sapiens

<400> 6134

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Pro	Asp	Val	Gly	Gly	Gly	Trp	Leu	Glu	Gly	Arg	Asn	Ile	Lys	Gly	Glu
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Arg	Gly	Leu	Val	Pro	Thr	Asp	Tyr	Val	Glu	Ile	Leu	Pro	Ser	Asp	Gly
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Lys	Asp	Gln	Phe	Ser	Cys	Gly	Asn	Ser	Val	Ala	Asp	Gln	Ala	Phe	Leu
65					70					75				80	
Asp	Ser	Leu	Ser	Ala	Ser	Thr	Ala	Gln	Ala	Ser	Ser	Ser	Ala	Ala	Ser
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Asn	Asn	His	Gln	Val	Gly	Ser	Gly	Asn	Asp	Pro	Trp	Ser	Ala	Trp	Ser
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Ala	Ser	Lys	Ser	Gly	Asn	Trp	Glu	Ser	Ser	Glu	Gly	Trp	Gly	Ala	Gln

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Asp Asp Asp Asp Trp Asp Glu Asp Trp Asp Gly Pro Lys Ser Ser Ser		
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Tyr Phe Lys Asp Ser Glu Ser Ala Asp Ala Gly Gly Ala Gln Arg Gly		
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195	200	205
Pro Gly Phe Ala Lys Pro Gly Thr Glu Gln Tyr Leu Leu Ala Lys Gln		
210	215	220
Leu Ala Lys Pro Lys Glu Lys Ile Pro Ile Ile Val Gly Asp Tyr Gly		
225	230	235
Pro Met Trp Val Tyr Pro Thr Ser Thr Phe Asp Cys Val Val Ala Asp		
245	250	255
Pro Arg Lys Gly Ser Lys Met Tyr Gly Leu Lys Ser Tyr Ile Glu Tyr		
260	265	270
Gln Leu Thr Pro Thr Asn Thr Asn Arg Ser Val Asn His Arg Tyr Lys		
275	280	285
His Phe Asp Trp Leu Tyr Glu Arg Leu Leu Val Lys Phe Gly Ser Ala		
290	295	300
Ile Pro Ile Pro Ser Leu Pro Asp Lys Gln Val Thr Gly Arg Phe Glu		
305	310	315
Glu Glu Phe Ile Lys Met Arg Met Glu Arg Leu Gln Ala Trp Met Thr		
325	330	335
Arg Met Cys Arg His Pro Val Ile Ser Glu Ser Glu Val Phe Gln Gln		
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Phe Leu Asn Phe Arg Asp Glu Lys Glu Trp Lys Thr Gly Lys Arg Lys		
355	360	365
Ala Glu Arg Asp Glu Leu Ala Gly Val Met Ile Phe Ser Thr Met Glu		
370	375	380
Pro Glu Ala Pro Asp Leu Asp Leu Val Glu Ile Glu Gln Lys Cys Glu		
385	390	395
Ala Val Gly Lys Phe Thr Lys Ala Met Asp Asp Gly Val Lys Glu Leu		
405	410	415
Leu Thr Val Gly Gln Glu His Trp Lys Arg Cys Thr Gly Pro Leu Pro		
420	425	430
Lys Glu Tyr Gln Lys Ile Gly Lys Ala Leu Gln Ser Leu Ala Thr Val		
435	440	445
Phe Ser Ser Ser Gly Tyr Gln Gly Glu Thr Asp Leu Asn Asp Ala Ile		
450	455	460
Thr Glu Ala Gly Lys Thr Tyr Glu Glu Ile Ala Ser Leu Val Ala Glu		
465	470	475
Gln Pro Lys Lys Asp Leu His Phe Leu Met Glu Cys Asn His Glu Tyr		
485	490	495
Lys Gly Phe Leu Gly Cys Phe Pro Asp Ile Ile Gly Thr His Lys Gly		
500	505	510
Ala Ile Glu Lys Val Lys Glu Ser Asp Lys Leu Val Ala Thr Ser Lys		
515	520	525
Ile Thr Leu Gln Asp Lys Gln Asn Met Val Lys Arg Val Ser Ile Met		
530	535	540
Ser Tyr Ala Leu Gln Ala Glu Met Asn His Phe His Ser Asn Arg Ile		

545 550 555 560
 Tyr Asp Tyr Asn Ser Val Ile Arg Leu Tyr Leu Glu Gln Gln Val Gln
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 Pro Val Met
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<210> 6135
 <211> 526
 <212> DNA
 <213> Homo sapiens

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 240
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 360
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 420
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<210> 6136
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 6136
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 20 25 30
 Ser Gln Pro Gln Pro Phe Ala Gly Thr Ala Gly Ser Leu Leu Ser His
 35 40 45
 Leu Leu Ser Leu Glu His Val Gly Ile Leu His Lys Asp Phe Glu Ser
 50 55 60
 Ile Leu Pro Thr Arg Lys Asn His Asn Met Ala Ser Arg Pro Leu Thr
 65 70 75 80
 Phe Thr Pro Gln Pro Tyr Val Thr Ser Pro Ala Ala Tyr Thr Asp Ala
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 Leu Val Lys Pro Ser Ala Ser Gln Tyr
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<210> 6137
<211> 2073
<212> DNA
<213> Homo sapiens

<400> 6137
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<210> 6138
 <211> 550
 <212> PRT
 <213> Homo sapiens

<400> 6138
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 35 40 45
 Gly Val Pro Asn Ser Ala Pro Phe Lys Glu Ala Leu Leu Arg Glu Ala
 50 55 60
 Glu Leu Arg Lys Gln Arg Leu Glu Glu Leu Lys Lys Gln Gln Lys Leu
 65 70 75 80
 Asp Arg Gln Lys Glu Leu Glu Lys Lys Arg Lys Leu Glu Thr Asn Pro
 85 90 95
 Asp Ile Lys Xaa Ile Lys Cys Gly Thr Xaa Met Glu Lys Glu Phe Gly
 100 105 110
 Leu Cys Lys Thr Glu Asn Lys Ala Lys Ser Gly Lys Gln Asn Ser Lys
 115 120 125
 Lys Leu Tyr Cys Gln Glu Leu Lys Lys Val Ile Glu Ala Ser Asp Val
 130 135 140
 Val Leu Glu Val Leu Asp Ala Arg Asp Pro Leu Gly Cys Arg Cys Pro
 145 150 155 160
 Gln Val Glu Glu Ala Ile Val Gln Ser Gly Gln Lys Lys Leu Val Leu
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 Ile Leu Asn Lys Ser Asp Leu Val Pro Lys Glu Asn Leu Glu Ser Trp
 180 185 190
 Leu Asn Tyr Leu Lys Lys Glu Leu Pro Thr Val Val Phe Arg Ala Ser

195	200	205
Thr Lys Pro Lys Asp Lys Gly Lys Ile Thr Lys Arg Val Lys Ala Lys		
210	215	220
Lys Asn Ala Ala Pro Phe Arg Ser Glu Val Cys Phe Gly Lys Glu Gly		
225	230	235
Leu Trp Lys Leu Leu Gly Gly Phe Gln Glu Thr Cys Ser Lys Ala Ile		
245	250	255
Arg Val Gly Val Ile Gly Phe Pro Asn Val Gly Lys Ser Ser Ile Ile		
260	265	270
Asn Ser Leu Lys Gln Glu Gln Met Cys Asn Val Gly Val Ser Met Gly		
275	280	285
Leu Thr Arg Ser Met Gln Val Val Pro Leu Asp Lys Gln Ile Thr Ile		
290	295	300
Ile Asp Ser Pro Ser Phe Ile Val Ser Pro Leu Asn Ser Ser Ser Ala		
305	310	315
Leu Ala Leu Arg Ser Pro Ala Ser Ile Glu Val Val Lys Pro Met Glu		
325	330	335
Ala Ala Ser Ala Ile Leu Ser Gln Ala Asp Ala Arg Gln Val Val Leu		
340	345	350
Lys Tyr Thr Val Pro Gly Tyr Arg Asn Ser Leu Glu Phe Phe Thr Val		
355	360	365
Leu Ala Gln Arg Arg Gly Met His Gln Lys Gly Gly Ile Pro Asn Val		
370	375	380
Glu Gly Ala Ala Lys Leu Leu Trp Ser Glu Trp Thr Gly Ala Ser Leu		
385	390	395
Ala Tyr Tyr Cys His Pro Pro Thr Ser Trp Thr Pro Pro Pro Tyr Phe		
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Asn Glu Ser Ile Val Val Asp Met Lys Ser Gly Phe Asn Leu Glu Glu		
420	425	430
Leu Glu Lys Asn Asn Ala Gln Ser Ile Arg Ala Ile Lys Gly Pro His		
435	440	445
Leu Ala Asn Ser Ile Leu Phe Gln Ser Ser Gly Leu Thr Asn Gly Ile		
450	455	460
Ile Glu Glu Lys Asp Ile His Glu Glu Leu Pro Lys Arg Lys Glu Arg		
465	470	475
Lys Gln Glu Glu Arg Glu Asp Asp Lys Asp Ser Asp Gln Glu Thr Val		
485	490	495
Asp Glu Glu Val Asp Glu Asn Ser Ser Gly Met Phe Ala Ala Glu Glu		
500	505	510
Thr Gly Glu Ala Leu Ser Glu Glu Thr Thr Ala Gly Glu Gln Ser Thr		
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Phe Ser Thr Asp Tyr Val		
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<210> 6139

<211> 2249

<212> DNA

<213> Homo sapiens

<400> 6139

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<210> 6140

<211> 381

<212> PRT

<213> Homo sapiens

<400> 6140

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Leu	Leu	Leu	Gly	Val	Leu	His	Pro	Asn	Thr	Lys	Leu	Arg	Gln	Ala	Glu
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Arg	Leu	Phe	Glu	Asn	Gln	Leu	Val	Gly	Pro	Glu	Ser	Ile	Ala	His	Ile
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Gly	Asp	Val	Met	Phe	Thr	Gly	Thr	Ala	Asp	Gly	Arg	Val	Val	Lys	Leu
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Glu	Asn	Gly	Glu	Ile	Glu	Thr	Ile	Ala	Arg	Phe	Xaa	Phe	Gly	Pro	Xaa
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Cys	Lys	Thr	Arg	Asp	Asp	Glu	Pro	Val	Cys	Gly	Arg	Pro	Leu	Gly	Ile
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Arg	Ala	Gly	Pro	Asn	Gly	Thr	Leu	Phe	Val	Ala	Asp	Ala	Tyr	Lys	Gly
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<211> 5651

<212> DNA

<213> Homo sapiens

<400> 6141

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<211> 513

<212> PRT

<213> Homo sapiens

<400> 6142

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<211> 1137

<212> DNA

<213> Homo sapiens

<400> 6143

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1852

<210> 6148

<211> 410

<212> PRT

<213> Homo sapiens

<400> 6148

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Gly Trp Ile Lys Lys Gly Thr Asp Val Asp Val Gly Pro Phe Leu Asn
 35           40           45
Ser Leu Val Gln Glu Gly Glu Trp Glu Arg Ala Ala Val Ala Leu
 50           55           60
Phe Asn Leu Asp Ile Arg Arg Ala Ile Gln Ile Leu Asn Glu Gly Ala
 65           70           75           80
Ser Ser Glu Lys Gly Asp Leu Asn Leu Asn Val Val Ala Met Ala Leu
      85           90           95
Ser Gly Tyr Thr Asp Glu Lys Asn Ser Leu Trp Arg Glu Met Cys Ser
      100           105           110
Thr Leu Arg Leu Gln Leu Asn Asn Pro Tyr Leu Cys Val Met Phe Ala
      115           120           125
Phe Leu Thr Ser Glu Thr Gly Ser Tyr Asp Gly Val Leu Tyr Glu Asn
      130           135           140
Lys Val Ala Val Arg Asp Arg Val Ala Phe Ala Cys Lys Phe Leu Ser
      145           150           155           160
Asp Thr Gln Leu Asn Arg Tyr Ile Glu Lys Leu Thr Asn Glu Met Lys
      165           170           175
Glu Ala Gly Asn Leu Glu Gly Ile Leu Leu Thr Gly Leu Thr Lys Asp
      180           185           190
Gly Val Asp Leu Met Glu Ser Tyr Val Asp Arg Thr Gly Asp Val Gln
      195           200           205
Thr Ala Ser Tyr Cys Met Leu Gln Gly Ser Pro Leu Asp Val Leu Lys
      210           215           220
Asp Glu Arg Val Gln Tyr Trp Ile Glu Asn Tyr Arg Asn Leu Leu Asp
      225           230           235           240
Ala Trp Arg Phe Trp His Lys Arg Ala Glu Phe Asp Ile His Arg Ser
      245           250           255
Lys Leu Asp Pro Ser Ser Lys Pro Leu Ala Gln Val Phe Val Ser Cys
      260           265           270
Asn Phe Cys Gly Lys Ser Ile Ser Tyr Ser Cys Ser Ala Val Pro His
      275           280           285
Gln Gly Arg Gly Phe Ser Gln Tyr Gly Val Ser Gly Ser Pro Thr Lys
      290           295           300
Ser Lys Val Thr Ser Cys Pro Gly Cys Arg Lys Pro Leu Pro Arg Cys
      305           310           315           320
Ala Leu Cys Leu Ile Asn Met Gly Thr Pro Val Ser Ser Cys Pro Gly
      325           330           335
Gly Thr Lys Ser Asp Glu Lys Val Asp Leu Ser Lys Asp Lys Lys Leu
      340           345           350
Ala Gln Phe Asn Asn Trp Phe Thr Trp Cys His Asn Cys Arg His Gly
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Gly His Ala Gly His Met Leu Ser Trp Phe Arg Asp His Ala Glu Cys
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Pro Val Ser Ala Cys Thr Cys Lys Cys Met Gln Leu Asp Thr Thr Gly

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 405 410

<210> 6149
 <211> 1949
 <212> DNA
 <213> Homo sapiens

<400> 6149
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 1949

<210> 6150

<211> 508

<212> PRT

<213> Homo sapiens

<400> 6150

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			20					25					30		
Lys	Val	Ser	Leu	Thr	Lys	Thr	Pro	Lys	Leu	Glu	Arg	Gly	Asp	Gly	Gly
			35				40					45			
Lys	Glu	Val	Arg	Glu	Arg	Ala	Ser	Lys	Arg	Lys	Leu	Pro	Phe	Thr	Ala
			50			55					60				
Gly	Ala	Asn	Gly	Glu	Gln	Lys	Asp	Ser	Asp	Thr	Glu	Lys	Gln	Gly	Pro
65					70					75				80	
Glu	Arg	Lys	Arg	Ile	Lys	Lys	Glu	Pro	Val	Thr	Arg	Lys	Ala	Gly	Leu
			85					90						95	
Leu	Phe	Gly	Met	Gly	Leu	Ser	Gly	Ile	Arg	Ala	Gly	Tyr	Pro	Leu	Ser
			100					105					110		
Glu	Arg	Gln	Gln	Val	Ala	Leu	Leu	Met	Gln	Met	Thr	Ala	Glu	Glu	Ser
			115				120					125			
Ala	Asn	Ser	Pro	Val	Asp	Thr	Thr	Pro	Lys	His	Pro	Ser	Gln	Ser	Thr
			130				135				140				
Val	Cys	Gln	Lys	Gly	Thr	Pro	Asn	Ser	Ala	Ser	Lys	Thr	Lys	Asp	Lys
145					150					155				160	
Leu	Asn	Lys	Arg	Asn	Glu	Arg	Gly	Glu	Thr	Arg	Leu	His	Arg	Ala	Ala
			165					170						175	
Ile	Arg	Gly	Asp	Ala	Arg	Arg	Ile	Lys	Glu	Leu	Ile	Ser	Glu	Gly	Ala
			180					185					190		
Asp	Val	Asn	Val	Lys	Asp	Phe	Ala	Gly	Trp	Thr	Ala	Leu	His	Glu	Ala

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210	215	220
Ala Glu Val Asn Thr Lys Gly Leu Asp Asp Asp Thr Pro Leu His Asp		
225	230	235
Ala Ala Asn Asn Gly His Tyr Lys Val Val Lys Leu Leu Leu Arg Tyr		
245	250	255
Gly Gly Asn Pro Gln Gln Ser Asn Arg Lys Gly Glu Thr Pro Leu Lys		
260	265	270
Val Ala Asn Ser Pro Thr Met Val Asn Leu Leu Leu Gly Lys Gly Thr		
275	280	285
Tyr Thr Ser Ser Glu Glu Ser Ser Thr Glu Ser Ser Glu Glu Glu Asp		
290	295	300
Ala Pro Ser Phe Ala Pro Ser Ser Ser Val Asp Gly Asn Asn Thr Asp		
305	310	315
Ser Glu Phe Glu Lys Gly Leu Lys His Lys Ala Lys Asn Pro Glu Pro		
325	330	335
Gln Lys Ala Thr Ala Pro Val Lys Asp Glu Tyr Glu Phe Asp Glu Asp		
340	345	350
Asp Glu Gln Asp Arg Val Pro Pro Val Asp Asp Lys His Leu Leu Lys		
355	360	365
Lys Asp Tyr Arg Lys Glu Thr Lys Ser Asn Ser Phe Ile Ser Ile Pro		
370	375	380
Lys Met Glu Val Lys Ser Tyr Thr Lys Asn Asn Thr Ile Ala Pro Lys		
385	390	395
Lys Ala Ser His Arg Ile Leu Ser Asp Thr Ser Asp Glu Glu Asp Ala		
405	410	415
Ser Val Thr Val Gly Thr Gly Glu Lys Leu Arg Leu Ser Ala His Thr		
420	425	430
Ile Leu Pro Gly Ser Lys Thr Arg Glu Pro Ser Asn Ala Lys Gln Gln		
435	440	445
Lys Glu Lys Asn Lys Val Lys Lys Lys Arg Lys Lys Glu Thr Lys Gly		
450	455	460
Arg Glu Val Arg Phe Gly Lys Arg Ser Xaa Ser Ser Ala Pro Arg Ser		
465	470	475
Arg Arg Ala Ser Pro Gln Arg Val Gly Arg Met Thr Gly Thr Leu Trp		
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<210> 6151

<211> 648

<212> DNA

<213> Homo sapiens

<400> 6151

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120

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240

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<210> 6152

<211> 130

<212> PRT

<213> Homo sapiens

<400> 6152

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			20					25					30		
Glu	Arg	Val	Ala	Phe	Ser	Leu	Phe	Thr	His	Thr	Cys	Thr	Gln	Pro	Leu
		35					40					45			
Ala	Gly	Thr	Val	Asp	Thr	His	Leu	Pro	Ser	Leu	Leu	Leu	Pro	Val	Ile
	50					55				60					
Leu	His	Pro	Leu	Gly	Ala	Ala	Ser	Ala	Gly	Arg	Ala	Leu	Glu	Pro	Lys
65				70					75					80	
Ala	Asp	Pro	His	Thr	Cys	Pro	Tyr	Gly	Arg	Lys	Glu	Ser	Arg	Gly	Glu
			85					90					95		
Lys	Val	Arg	Arg	Gly	Arg	Ala	Lys	Ser	Asn	Ser	Gly	Pro	Asn	Val	Pro
			100					105					110		
Gly	Pro	Pro	Ala	Ala	Pro	Gln	Ser	Leu	Lys	Ser	Gly	Ser	Pro	Ser	Thr
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<210> 6153

<211> 1810

<212> DNA

<213> Homo sapiens

<400> 6153

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 240

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720
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 <211> 388
 <212> PRT
 <213> Homo sapiens

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 Asn Phe Ser Pro Ser Gly His Leu Leu Ala Ser Gly Ser Arg Asp Lys
 50 55 60
 Thr Val Arg Ile Trp Val Pro Asn Val Lys Gly Glu Ser Thr Val Phe
 65 70 75 80
 Arg Ala His Thr Ala Thr Val Arg Ser Val His Phe Cys Ser Asp Gly
 85 90 95
 Gln Ser Phe Val Thr Ala Ser Asp Asp Lys Thr Val Lys Val Trp Ala
 100 105 110
 Thr His Arg Gln Lys Phe Leu Phe Ser Leu Ser Gln His Ile Asn Trp
 115 120 125
 Val Arg Cys Ala Lys Phe Ser Pro Asp Gly Arg Leu Ile Val Ser Ala
 130 135 140
 Ser Asp Asp Lys Thr Val Lys Leu Trp Asp Lys Ser Ser Arg Glu Cys
 145 150 155 160
 Val His Ser Tyr Cys Glu His Gly Gly Phe Val Thr Tyr Val Asp Phe
 165 170 175
 His Pro Ser Gly Thr Cys Ile Ala Ala Ala Gly Met Asp Asn Thr Val
 180 185 190
 Lys Val Trp Asp Val Arg Thr His Arg Leu Leu Gln His Tyr Gln Leu
 195 200 205
 His Ser Ala Ala Val Asn Gly Leu Ser Phe His Pro Ser Gly Asn Tyr
 210 215 220
 Leu Ile Thr Ala Ser Ser Asp Ser Thr Leu Lys Ile Leu Asp Leu Met
 225 230 235 240
 Glu Gly Arg Leu Leu Tyr Thr Leu His Gly His Gln Gly Pro Ala Thr
 245 250 255
 Thr Val Ala Phe Ser Arg Thr Gly Glu Tyr Phe Ala Ser Gly Gly Ser
 260 265 270
 Asp Glu Gln Val Met Val Trp Lys Ser Asn Phe Asp Ile Val Asp His
 275 280 285
 Gly Glu Val Thr Lys Val Pro Arg Pro Pro Ala Thr Leu Ala Ser Ser
 290 295 300
 Met Gly Asn Leu Pro Glu Val Asp Phe Pro Val Pro Pro Gly Arg Gly
 305 310 315 320
 Trp Ser Val Glu Ser Val Gln Ser Gln Pro Gln Glu Pro Val Ser Val
 325 330 335
 Pro Gln Thr Leu Thr Ser Thr Leu Glu His Ile Val Gly Gln Leu Asp
 340 345 350
 Val Leu Thr Gln Thr Val Ser Ile Leu Glu Gln Arg Leu Thr Leu Thr
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380

<210> 6155
<211> 995
<212> DNA
<213> Homo sapiens

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995

<210> 6156
<211> 164
<212> PRT
<213> Homo sapiens

<400> 6156
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840

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<210> 6158

<211> 455

<212> PRT

<213> Homo sapiens

<400> 6158

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20										25					30				
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Ile	Ser	Tyr	Asp	Tyr	Leu	Thr	Ser	Leu	Lys	Ser	Val	Pro	Tyr	Gly	Ser				
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			340			345						350							
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Ser	Phe	Leu	Asn	Met	Ser	Arg	Cys	Cys	Ile	Arg	Ala	Leu	Ala	Glu	His				
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455

<210> 6159

<211> 4310

<212> DNA

<213> Homo sapiens

<400> 6159

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<210> 6160

<211> 551

<212> PRT

<213> Homo sapiens

<400> 6160

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5345

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465	470	475
Leu Ala Asn Thr Gly Ile Val Asn His Thr His Ser Arg Met Gly Ser		480
	485	490
Ile Met Ser Thr Gly Ile Val Gln Gly Ser Ser Gly Ala Gln Gly Ser		495
	500	505
Gly Gly Gly Ser Thr Ser Ala His Tyr Ala Val Asn Ser Gln Phe Thr		510
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Met Gly Gly Pro Ala Ile Ser Met Ala Ser Pro Met Ser Ile Pro Thr		525
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<210> 6161

<211> 1489

<212> DNA

<213> Homo sapiens

<400> 6161

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1020

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<210> 6162
 <211> 58
 <212> PRT
 <213> Homo sapiens

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<210> 6163
 <211> 713
 <212> DNA
 <213> Homo sapiens

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<210> 6164

<211> 120

<212> PRT

<213> Homo sapiens

<400> 6164

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			20					25					30		
Pro	Leu	Pro	Gly	Lys	Ala	Gly	Leu	Ala	Leu	Leu	Lys	Pro	Gln	Ser	Arg
		35					40					45			
Ser	Asp	Gly	Tyr	Arg	Tyr	Leu	Gly	Lys	Asp	Thr	Val	Asp	Gly	Leu	Asp
	50					55					60				
Ser	Ser	Leu	Leu	Lys	Cys	Thr	Arg	Arg	Cys	Met	Arg	Gly	Phe	Arg	Leu
65					70				75					80	
Pro	Glu	Lys	Gln	Pro	Ser	Lys	Thr	Arg	Val	Ser	Phe	Leu	Glu	Ser	Lys
			85					90					95		
Arg	Lys	Glu	Gly	Ser	Gly	Trp	Leu	His	Trp	Ser	Val	Thr	Arg	Ser	Gly
			100				105						110		
Ala	Phe	Arg	Leu	Lys	Val	Thr	Val								
			115				120								

<210> 6165

<211> 1004

<212> DNA

<213> Homo sapiens

<400> 6165

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<210> 6166

<211> 239

<212> PRT

<213> Homo sapiens

<400> 6166

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			20					25					30		
Gly	Gly	Pro	Thr	Pro	Gln	Glu	Ala	Ile	Gln	Arg	Leu	Arg	Asp	Thr	Glu
			35				40					45			
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Glu	Leu	Thr	Ala	Ala	Lys	Lys	His	Gly	Thr	Lys	Asn	Lys	Arg	Ala	Ala
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Ile	Asp	Gly	Thr	Leu	Ser	Thr	Ile	Glu	Phe	Gln	Arg	Glu	Ala	Leu	Glu
			100				105					110			
Asn	Ala	Asn	Thr	Asn	Thr	Glu	Val	Leu	Lys	Asn	Met	Gly	Tyr	Ala	Ala
		115				120						125			
Lys	Ala	Met	Lys	Ala	Ala	His	Asp	Asn	Met	Asp	Ile	Asp	Lys	Val	Asp
	130					135				140					
Glu	Leu	Met	Gln	Asp	Ile	Ala	Asp	Gln	Gln	Glu	Leu	Ala	Glu	Glu	Ile
145				150						155				160	
Ser	Thr	Ala	Ile	Ser	Lys	Pro	Val	Gly	Phe	Gly	Glu	Glu	Phe	Asp	Glu
			165					170					175		
Asp	Glu	Leu	Met	Ala	Glu	Leu	Glu	Glu	Leu	Glu	Gln	Glu	Glu	Leu	Asp
		180				185						190			
Lys	Asn	Leu	Leu	Glu	Ile	Ser	Gly	Pro	Glu	Thr	Val	Pro	Leu	Pro	Asn
		195				200						205			
Val	Pro	Ser	Ile	Ala	Leu	Pro	Ser	Lys	Pro	Ala	Lys	Lys	Lys	Glu	Glu
	210					215						220			
Glu	Asp	Asp	Asp	Met	Lys	Glu	Leu	Glu	Asn	Trp	Ala	Gly	Ser	Met	

225

230

235

<210> 6167

<211> 1220

<212> DNA

<213> Homo sapiens

<400> 6167

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120
tcaaacttgt cttaatgaga tggaagtgtt ggatcaaaca ctgattgagc tgttctatgt
180
cctccacttc cccagtgcct tctctcctcc cgggtctgcy cggacgcggc ctccttacct
240
catttgcctt cgccccctcc cgtccctcta cgcgttttgg tccctgtttg gtgctttctg
300
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360
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420
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480
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540
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720
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900
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960
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1020
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1080
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<210> 6168

<211> 90

<212> PRT

<213> Homo sapiens

<400> 6168

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Ala Lys Trp Gln Ile Trp Thr Val Ser Ile Asp Ala Asp Glu Pro His
 1             5             10             15
Pro Gly Thr Gly Glu Val Glu Asp Ile Glu Gln Leu Asn Gln Cys Leu
      20             25             30
Ile Gln His Phe His Leu Ile Lys Thr Ser Leu Ile Phe Leu Cys Phe
      35             40             45
Leu Phe His Gly Ile His Glu Asn Leu Leu Thr Val Gly Val Ser Lys
      50             55             60
Glu Ala Tyr Leu Met Thr Ser Val Asn Gly Lys Asn Lys Thr Lys Met
65             70             75             80
Leu Tyr Gly Gln Ser His Lys Gly Lys Asp
      85             90

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<210> 6169

<211> 720

<212> DNA

<213> Homo sapiens

<400> 6169

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120
cagtgaacccc aggcttttta tggctgtgaa acacgttaaa atttcagggt aagacgtgac
180
cttttgaggt gactataact gaagattgct ttacagaagc ccaaaaaggt tttttgagtc
240
atgatgcaag aatctgggac tgagacaaaa agtaacgggt cagccatcca gaatgggtcg
300
ggcggcagca accacttact agagtgcggc ggtcttcggg aggggagggt caacggagag
360
acgccggccg tggacatcgg ggcagctgac ctgcgccacg ccagcagca gcagcaacag
420
tggcatctca taaaccatca gccctctagg agtcccagca gttggcttaa gagactaatt
480
tcaagccctt gggagttgga agtcctgcag gtcccttggt gggagcagtt gctgagacga
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agatgagtgg acctgtgtgt cagcctaacc cttccccatt ttgaataaaa ttattctttg
600
gagaaatggt tccactgct ttcattgcaa aataaaaatt aaacgaaaaa cagcttaagc
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<210> 6170

<211> 101

<212> PRT

<213> Homo sapiens

<400> 6170

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		20		25		30									
Arg	Glu	Gly	Arg	Ser	Asn	Gly	Glu	Thr	Pro	Ala	Val	Asp	Ile	Gly	Ala
		35		40		45									
Ala	Asp	Leu	Ala	His	Ala	Gln	Gln	Gln	Gln	Gln	Gln	Trp	His	Leu	Ile
	50			55		60									
Asn	His	Gln	Pro	Ser	Arg	Ser	Pro	Ser	Ser	Trp	Leu	Lys	Arg	Leu	Ile
65				70		75								80	
Ser	Ser	Pro	Trp	Glu	Leu	Glu	Val	Leu	Gln	Val	Pro	Cys	Gly	Glu	Gln
		85		90		95									
Leu	Leu	Arg	Arg	Arg											
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<210> 6171

<211> 1130

<212> DNA

<213> Homo sapiens

<400> 6171

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120
tatgaggtga acccacggac cacagagatt ttacatcacc tttcagaacg caacagggtc
180
cgggacaggg atgtctacct ggtaatagag gacttgaagc agaaagcaag tgaatacgag
240
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ctctctagca ctggttccag gtatctgaat gctttgggtg acagtgcggt ggcccttgaa
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480
ttaactgcaa ctttagtatt agaaaaatgt ctacaagagg atgtcaagaa agcagagttg
540
catctgtcta cagaaagggc caaagttgat aatcgctcgc agaacatgga ctttctaaaa
600
gcaaagtcag aggaattcag atttggaatc aaggctgcag aggagcaact ttcagccaga
660
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720
ttaagcaac agactatacc tttgaagaaa aaattggagt cctattttaga cttaatgccg
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aatccgtctc ttgctcaagt gaaaattgaa gaagcaaagc gagaactaga tagcattgaa
840
gctgaactta caagaagagt agacatgatg gaactgtgac aaaagccaaa taaacatcct
900
tttccctaac aaagtaaatt gaataggact ttacagagtt ctttttcctc ttggcatttc
960
ctaataacaa aactttctgt gttcttagat tacagaatat cataattgat agaatatggt
1020

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 1130

<210> 6172
 <211> 292
 <212> PRT
 <213> Homo sapiens

<400> 6172
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 20 25 30
 Phe Gly Asp His Pro Ile Pro Gln Tyr Glu Val Asn Pro Arg Thr Thr
 35 40 45
 Glu Ile Leu His His Leu Ser Glu Arg Asn Arg Val Arg Asp Arg Asp
 50 55 60
 Val Tyr Leu Val Ile Glu Asp Leu Lys Gln Lys Ala Ser Glu Tyr Glu
 65 70 75 80
 Ser Glu Ala Lys Tyr Leu Gln Asp Leu Leu Met Glu Ser Val Asn Phe
 85 90 95
 Ser Pro Ala Asn Leu Ser Ser Thr Gly Ser Arg Tyr Leu Asn Ala Leu
 100 105 110
 Val Asp Ser Ala Val Ala Leu Glu Thr Lys Asp Thr Ser Leu Ala Ser
 115 120 125
 Phe Ile Pro Ala Val Asn Asp Leu Thr Ser Asp Leu Phe Arg Thr Lys
 130 135 140
 Ser Lys Ser Glu Glu Ile Lys Ile Glu Leu Glu Lys Leu Glu Lys Asn
 145 150 155 160
 Leu Thr Ala Thr Leu Val Leu Glu Lys Cys Leu Gln Glu Asp Val Lys
 165 170 175
 Lys Ala Glu Leu His Leu Ser Thr Glu Arg Ala Lys Val Asp Asn Arg
 180 185 190
 Arg Gln Asn Met Asp Phe Leu Lys Ala Lys Ser Glu Glu Phe Arg Phe
 195 200 205
 Gly Ile Lys Ala Ala Glu Glu Gln Leu Ser Ala Arg Gly Met Asp Ala
 210 215 220
 Ser Leu Ser His Gln Ser Leu Val Ala Leu Ser Glu Lys Leu Ala Arg
 225 230 235 240
 Leu Lys Gln Gln Thr Ile Pro Leu Lys Lys Lys Leu Glu Ser Tyr Leu
 245 250 255
 Asp Leu Met Pro Asn Pro Ser Leu Ala Gln Val Lys Ile Glu Glu Ala
 260 265 270
 Lys Arg Glu Leu Asp Ser Ile Glu Ala Glu Leu Thr Arg Arg Val Asp
 275 280 285
 Met Met Glu Leu
 290

<210> 6173
 <211> 1483
 <212> DNA
 <213> Homo sapiens

<400> 6173

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120
caaggcctgt tgatgcagcc atgggcgtgg ctacagcttg cagagaactc cctcttggcc
180
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240
catgaacagg tggacactag tgtggtcagc cagcgagcca aggagctgaa caagcggctc
300
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480
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600
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720
gatggaaagc cctttgtcat gaatctgcag gatctgtata tggcagtcac cacacaagag
780
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900
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1483

<210> 6174

<211> 299
 <212> PRT
 <213> Homo sapiens

<400> 6174

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Gln Leu Ala Glu Asn Ser Leu Leu Ala Lys Val Phe Ile Thr Lys Gln
 20           25           30
Gly Tyr Ala Leu Leu Val Ser Asp Leu Gln Gln Val Trp His Glu Gln
 35           40           45
Val Asp Thr Ser Val Val Ser Gln Arg Ala Lys Glu Leu Asn Lys Arg
 50           55           60
Leu Thr Ala Pro Pro Ala Ala Phe Leu Cys His Leu Asp Asn Leu Leu
 65           70           75           80
Arg Pro Leu Leu Lys Asp Ala Ala His Pro Ser Glu Ala Thr Phe Ser
 85           90           95
Cys Asp Cys Val Ala Asp Ala Leu Ile Leu Arg Val Arg Ser Glu Leu
 100          105          110
Ser Gly Leu Pro Phe Tyr Trp Asn Phe His Cys Met Leu Ala Ser Pro
 115          120          125
Ser Leu Val Ser Gln His Leu Ile Arg Pro Leu Met Gly Met Ser Leu
 130          135          140
Ala Leu Gln Cys Gln Val Arg Glu Leu Ala Thr Leu Leu His Met Lys
 145          150          155          160
Asp Leu Glu Ile Gln Asp Tyr Gln Glu Ser Gly Ala Thr Leu Ile Arg
 165          170          175
Asp Arg Leu Lys Thr Glu Pro Phe Glu Glu Asn Ser Phe Leu Glu Gln
 180          185          190
Phe Met Ile Glu Lys Leu Pro Glu Ala Cys Ser Ile Gly Asp Gly Lys
 195          200          205
Pro Phe Val Met Asn Leu Gln Asp Leu Tyr Met Ala Val Thr Thr Gln
 210          215          220
Glu Val Gln Val Gly Gln Lys His Gln Gly Ala Gly Asp Pro His Thr
 225          230          235          240
Ser Asn Ser Ala Ser Leu Gln Gly Ile Asp Ser Gln Cys Val Asn Gln
 245          250          255
Pro Glu Gln Leu Val Ser Ser Ala Pro Thr Leu Ser Ala Pro Glu Lys
 260          265          270
Glu Ser Thr Gly Thr Ser Gly Pro Leu Gln Arg Pro Gln Leu Ser Lys
 275          280          285
Val Lys Arg Lys Asn Pro Arg Gly Leu Phe Ser
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<210> 6175
 <211> 349
 <212> DNA
 <213> Homo sapiens

<400> 6175

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120

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aaaactgttc agtttggtgg aactgtgaca gaagtcttgc tgaagtacaa aaagggtgaa
 180
 acaaagtact ttgagttggt gaagaaccag ctgtagatc cagacataaa gagattgcct
 240
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<210> 6176
 <211> 90
 <212> PRT
 <213> Homo sapiens

<400> 6176
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 35 40 45
 Asp Ile Lys Arg Leu Pro Trp Leu Asn Arg Ser Gln Thr Val Val Glu
 50 55 60
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 65 70 75 80
 Leu Arg Pro Cys Leu Ser Met Ile Ala Ser
 85 90

<210> 6177
 <211> 1536
 <212> DNA
 <213> Homo sapiens

<400> 6177
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 480
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 720
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<210> 6178

<211> 310

<212> PRT

<213> Homo sapiens

<400> 6178

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 Arg Asn Ala Leu Glu Asn Ile Arg Lys Glu Met Lys Leu Leu Glu Gln
 35 40 45
 Ala Gly Ser Leu Lys Gly Ser Leu Ser Val Glu Glu Gln Leu Ser Leu
 50 55 60
 Ile Ser Gly Cys Pro Asn Ile Gln Glu Ala Val Glu Gly Ala Met His
 65 70 75 80
 Ile Gln Glu Cys Val Pro Glu Asp Leu Glu Leu Lys Lys Lys Ile Phe
 85 90 95
 Ala Gln Leu Asp Ser Ile Ile Asp Asp Arg Val Ile Leu Ser Ser Ser
 100 105 110
 Thr Ser Cys Leu Met Pro Ser Lys Leu Phe Ala Gly Leu Val His Val

115	120	125
Lys Gln Cys Ile Val Ala His Pro Val Asn Pro Pro Tyr Tyr Ile Pro		
130	135	140
Leu Val Glu Leu Val Pro His Pro Glu Thr Ala Pro Thr Thr Val Asp		
145	150	155
Arg Thr His Ala Leu Met Lys Lys Ile Gly Xaa Val Pro His Ala Ser		
165	170	175
Pro Glu Gly Gly Gly Arg Leu Arg Ser Glu Pro Pro Ala Ile Cys Asn		
180	185	190
His Gln Arg Gly Leu Ala Ala Ser Gly Gly Arg Asn Xaa Cys Leu Leu		
195	200	205
Val Thr Trp Xaa Leu Val Met Ser Glu Gly Leu Gly Met Arg Tyr Ala		
210	215	220
Phe Ile Gly Pro Leu Glu Thr Met His Leu Asn Ala Glu Gly Met Leu		
225	230	235
Ser Tyr Cys Asp Arg Tyr Ser Glu Gly Ile Lys His Val Leu Gln Thr		
245	250	255
Phe Gly Pro Ile Pro Glu Phe Ser Arg Ala Thr Ala Glu Lys Val Asn		
260	265	270
Gln Asp Met Cys Met Lys Val Pro Asp Asp Pro Glu His Leu Ala Ala		
275	280	285
Arg Arg Gln Trp Arg Asp Glu Cys Leu Met Arg Leu Ala Lys Leu Lys		
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Ser Gln Val Gln Pro Gln		
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<210> 6179

<211> 2940

<212> DNA

<213> Homo sapiens

<400> 6179

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180
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420
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660

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1800
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2280

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 2820
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<210> 6180

<211> 751

<212> PRT

<213> Homo sapiens

<400> 6180

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			20					25					30		
Trp	Arg	Xaa	Tyr	Leu	Thr	Asp	Glu	Phe	Ala	Lys	Gly	Arg	Lys	Val	Ala
		35				40					45				
Asp	Leu	Tyr	Glu	Leu	Val	Gln	Tyr	Ala	Gly	Asn	Ile	Ile	Pro	Arg	Leu
	50				55					60					
Tyr	Leu	Leu	Ile	Thr	Val	Gly	Val	Val	Tyr	Val	Lys	Ser	Phe	Pro	Gln
65				70					75					80	
Ser	Arg	Lys	Asp	Ile	Leu	Lys	Asp	Leu	Val	Glu	Met	Cys	Arg	Gly	Val
			85					90						95	
Gln	His	Pro	Leu	Arg	Gly	Leu	Phe	Leu	Arg	Asn	Tyr	Leu	Leu	Gln	Cys
		100						105						110	
Thr	Arg	Asn	Ile	Leu	Pro	Asp	Glu	Gly	Glu	Pro	Thr	Asp	Glu	Glu	Thr
		115				120						125			
Thr	Gly	Asp	Ile	Ser	Asp	Ser	Met	Asp	Phe	Val	Leu	Leu	Asn	Phe	Ala
	130					135					140				
Glu	Met	Asn	Lys	Leu	Trp	Val	Arg	Met	Gln	His	Gln	Gly	His	Ser	Arg
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Asp	Arg	Glu	Lys	Arg	Glu	Arg	Glu	Arg	Gln	Glu	Leu	Arg	Ile	Leu	Val
			165					170						175	
Gly	Thr	Asn	Leu	Val	Arg	Leu	Ser	Xaa	Ser	Trp	Arg	Cys	Lys	Cys	Gly
		180						185					190		
Thr	Leu	Gln	Gln	Ile	Val	Leu	Thr	Gly	Ile	Leu	Glu	Gln	Val	Val	Asn

195	200	205
Cys Arg Asp Ala Leu Ala Gln Glu Tyr Leu Met Glu Cys Ile Ile Gln		
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Val Phe Pro Asp Glu Phe His Leu Gln Thr Leu Asn Pro Phe Leu Arg		
225	230	235
Ala Cys Ala Glu Leu His Gln Asn Val Asn Val Lys Asn Ile Ile Ile		
245	250	255
Ala Leu Ile Asp Arg Leu Ala Leu Phe Ala His Arg Glu Asp Gly Pro		
260	265	270
Gly Ile Pro Ala Asp Ile Lys Leu Phe Asp Ile Phe Ser Gln Gln Val		
275	280	285
Ala Thr Val Ile Gln Ser Arg Gln Asp Met Pro Ser Glu Asp Val Val		
290	295	300
Ser Leu Gln Val Ser Leu Ile Asn Leu Ala Met Lys Cys Tyr Pro Asp		
305	310	315
Arg Val Asp Tyr Val Asp Lys Val Leu Glu Thr Thr Val Glu Ile Phe		
325	330	335
Asn Lys Leu Asn Leu Glu His Ile Ala Thr Ser Ser Ala Val Ser Lys		
340	345	350
Glu Leu Thr Arg Leu Leu Lys Ile Pro Val Asp Thr Tyr Asn Asn Ile		
355	360	365
Leu Thr Val Leu Lys Leu Lys His Phe His Pro Leu Phe Glu Tyr Phe		
370	375	380
Asp Tyr Glu Ser Arg Lys Ser Met Ser Cys Tyr Val Leu Ser Asn Val		
385	390	395
Leu Asp Tyr Asn Thr Glu Ile Val Ser Gln Asp Gln Val Asp Ser Ile		
405	410	415
Met Asn Leu Val Ser Thr Leu Ile Gln Asp Gln Pro Asp Gln Pro Val		
420	425	430
Glu Asp Pro Asp Pro Glu Asp Phe Ala Asp Glu Gln Ser Leu Val Gly		
435	440	445
Arg Phe Ile His Leu Leu Arg Ser Glu Asp Pro Asp Gln Gln Tyr Leu		
450	455	460
Ile Leu Asn Thr Ala Arg Lys His Phe Gly Ala Gly Gly Asn Gln Arg		
465	470	475
Ile Arg Phe Thr Leu Pro Pro Leu Val Phe Ala Ala Tyr Gln Leu Ala		
485	490	495
Phe Arg Tyr Lys Glu Asn Ser Lys Trp Met Thr Asn Gly Lys Arg Asn		
500	505	510
Ala Arg Arg Phe Phe His Leu Pro Xaa Gln Thr Ile Ser Ala Leu Ile		
515	520	525
Lys Ala Glu Leu Ala Glu Leu Pro Leu Arg Leu Phe Leu Gln Gly Ala		
530	535	540
Leu Ala Ala Gly Glu Ile Gly Phe Glu Asn His Glu Thr Val Ala Tyr		
545	550	555
Glu Phe Met Ser Gln Ala Phe Ser Leu Tyr Glu Asp Glu Ile Ser Asp		
565	570	575
Ser Lys Ala Gln Leu Ala Ala Ile Thr Leu Ile Ile Gly Thr Phe Glu		
580	585	590
Arg Met Lys Cys Phe Ser Glu Glu Asn His Glu Pro Leu Arg Thr Gln		
595	600	605
Cys Ala Leu Ala Ala Ser Lys Leu Leu Lys Lys Pro Asp Gln Gly Arg		
610	615	620
Ala Glu His Leu Cys Thr Ser Leu Trp Ser Gly Arg Asn Thr Asp Lys		

625		630		635		640
Asn Gly Glu Glu Leu	His Gly Gly Lys Arg	Val Met Glu Cys Leu	Lys			
	645		650		655	
Lys Ala Leu Lys Ile	Ala Asn Gln Cys Met Asp	Pro Ser Leu Gln	Val			
	660		665		670	
Gln Leu Phe Ile Glu	Ile Leu Asn Arg Tyr Ile	Tyr Phe Tyr Glu	Lys			
	675		680		685	
Glu Asn Asp Ala Val	Thr Ile Gln Val Leu Asn	Gln Leu Ile Gln	Lys			
	690		695		700	
Ile Arg Glu Asp Leu	Pro Asn Leu Glu Ser Ser	Glu Glu Thr Glu	Gln			
705		710		715		720
Ile Asn Lys His Phe	His Asn Thr Leu Glu His	Leu Arg Leu Arg	Arg			
	725		730		735	
Glu Ser Pro Glu Ser	Glu Gly Pro Ile Tyr Glu	Gly Leu Ile Leu				
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<210> 6181

<211> 1135

<212> DNA

<213> Homo sapiens

<400> 6181

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120
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180
aacttccaga ccattctgtg tgagtttgag accctctaca aagctttctc aaactgcagc
240
ctcccgcgaag gatggaaaat gaacagcacc ccagcggggg agtggttcac cttttacttg
300
gtcaatcagg gggtttgtgt tcccaggaac tgtaggaagt gcccacggac gtaccgcttg
360
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420
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480
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600
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660
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720
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780
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900
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960

ggcctaacag cgcattcctt tgattggtcc ttgagtgacc agagacttag tgcccttgta
 1020
 agtctgtctt ctgttgctac ttgttttttt cagtgtcttg aaatagagta actaaatggg
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<210> 6182

<211> 236

<212> PRT

<213> Homo sapiens

<400> 6182

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Arg	Glu	Gln	Gly	Arg	Tyr	Leu	Asn	Ser	Arg	Pro	Ser	Ile	Gln	Lys	Pro
		20						25					30		
Glu	Val	Phe	Phe	Leu	Pro	Asp	Leu	Pro	Thr	Thr	Pro	Tyr	Phe	Ser	Arg
		35					40					45			
Asp	Ala	Gln	Lys	His	Asp	Val	Glu	Val	Leu	Glu	Arg	Asn	Phe	Gln	Thr
	50					55					60				
Ile	Leu	Cys	Glu	Phe	Glu	Thr	Leu	Tyr	Lys	Ala	Phe	Ser	Asn	Cys	Ser
65					70					75				80	
Leu	Pro	Gln	Gly	Trp	Lys	Met	Asn	Ser	Thr	Pro	Ser	Gly	Glu	Trp	Phe
			85						90					95	
Thr	Phe	Tyr	Leu	Val	Asn	Gln	Gly	Val	Cys	Val	Pro	Arg	Asn	Cys	Arg
			100					105					110		
Lys	Cys	Pro	Arg	Thr	Tyr	Arg	Leu	Leu	Gly	Ser	Leu	Arg	Thr	Cys	Ile
			115				120					125			
Gly	Asn	Asn	Val	Phe	Gly	Asn	Ala	Cys	Ile	Ser	Val	Leu	Ser	Pro	Gly
	130					135					140				
Thr	Val	Ile	Thr	Glu	His	Tyr	Gly	Pro	Thr	Asn	Ile	Arg	Ile	Arg	Cys
145					150					155				160	
His	Leu	Gly	Leu	Lys	Thr	Pro	Asn	Gly	Cys	Glu	Leu	Val	Val	Gly	Gly
				165					170					175	
Glu	Pro	Gln	Cys	Trp	Ala	Glu	Gly	Arg	Cys	Leu	Leu	Phe	Asp	Asp	Ser
			180					185					190		
Phe	Leu	His	Ala	Ala	Phe	His	Glu	Gly	Ser	Ala	Glu	Asp	Gly	Pro	Arg
		195					200					205			
Val	Val	Phe	Met	Val	Asp	Leu	Trp	His	Pro	Asn	Val	Ala	Ala	Ala	Glu
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Arg	Gln	Ala	Leu	Asp	Phe	Ile	Phe	Ala	Pro	Gly	Arg				
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<210> 6183

<211> 2530

<212> DNA

<213> Homo sapiens

<400> 6183

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180
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240
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720
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<210> 6184

<211> 308

<212> PRT

<213> Homo sapiens

<400> 6184

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Leu	Gly	Pro	Gly	Pro	Val	His	Gly	Arg	Asp	Pro	Gly	Pro	Gly	Gly	Pro
		20						25				30			
Gly	Met	Gly	Asn	Arg	Gly	Gly	Phe	Arg	Gly	Gly	Phe	Gly	Ser	Gly	Ile
	35						40					45			
Arg	Gly	Arg	Gly	Arg	Gly	Arg	Gly	Arg	Gly	Arg	Gly	Arg	Gly	Arg	Gly
	50					55					60				
Ala	Arg	Gly	Gly	Lys	Ala	Glu	Asp	Lys	Glu	Trp	Met	Pro	Val	Thr	Lys
65				70					75					80	
Leu	Gly	Arg	Leu	Val	Lys	Asp	Met	Lys	Ile	Lys	Ser	Leu	Glu	Glu	Ile
			85					90					95		
Tyr	Leu	Phe	Ser	Leu	Pro	Ile	Lys	Glu	Ser	Glu	Ile	Ile	Asp	Phe	Phe
		100					105						110		
Leu	Gly	Ala	Ser	Leu	Lys	Asp	Glu	Val	Leu	Lys	Ile	Met	Pro	Val	Gln
	115					120					125				
Lys	Gln	Thr	Arg	Ala	Gly	Gln	Arg	Thr	Arg	Phe	Lys	Ala	Phe	Val	Ala
	130					135					140				
Ile	Gly	Asp	Tyr	Asn	Gly	His	Val	Gly	Leu	Gly	Val	Lys	Cys	Ser	Lys

145 150 155 160
 Glu Val Ala Thr Ala Ile Arg Gly Ala Ile Ile Leu Ala Lys Leu Ser
 165 170 175
 Ile Val Pro Val Arg Arg Gly Tyr Trp Gly Asn Lys Ile Gly Lys Pro
 180 185 190
 His Thr Val Pro Cys Lys Val Thr Gly Arg Cys Gly Ser Val Leu Val
 195 200 205
 Arg Leu Ile Pro Ala Pro Arg Gly Thr Gly Ile Val Ser Ala Pro Val
 210 215 220
 Pro Lys Lys Leu Leu Met Met Ala Gly Ile Asp Asp Cys Tyr Thr Ser
 225 230 235 240
 Ala Arg Gly Cys Thr Ala Thr Leu Gly Asn Phe Ala Lys Ala Thr Phe
 245 250 255
 Asp Ala Ile Ser Lys Thr Tyr Ser Tyr Leu Thr Pro Asp Leu Trp Lys
 260 265 270
 Glu Thr Val Phe Thr Lys Ser Pro Tyr Gln Glu Phe Thr Asp His Leu
 275 280 285
 Val Lys Thr His Thr Arg Val Ser Val Gln Arg Thr Gln Ala Pro Ala
 290 295 300
 Val Ala Thr Thr
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<210> 6185

<211> 1231

<212> DNA

<213> Homo sapiens

<400> 6185

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 120
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 180
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 300
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 780

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 1200
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 1231

<210> 6186
 <211> 133
 <212> PRT
 <213> Homo sapiens

<400> 6186
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 35 40 45
 Ala Gln Leu Ser His Cys Lys Ser Leu Gly His Phe Glu Asn Leu Gln
 50 55 60
 Lys Tyr Lys Ala Ala Lys Asn Pro Ser Pro Thr Thr Arg Pro Val Ser
 65 70 75 80
 Arg Arg Cys Ala Ile Asn Ala Arg Asn Ala Leu Thr Ala Leu Phe Thr
 85 90 95
 Ser Ser Gly Arg Pro Pro Ser Gln Pro Asn Thr Gln Asp Lys Thr Pro
 100 105 110
 Ser Lys Val Thr Ala Arg Pro Ser Gln Pro Pro Leu Pro Arg Arg Ser
 115 120 125
 Thr Arg Leu Lys Thr
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<210> 6187
 <211> 909
 <212> DNA
 <213> Homo sapiens

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 180

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 420
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<212> PRT

<213> Homo sapiens

<400> 6188

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2160

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<210> 6194

<211> 621

<212> PRT

<213> Homo sapiens

<400> 6194

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			20					25				30			
Asn	Thr	His	Arg	Ala	Ile	Glu	Ser	Asn	Ser	Gln	Thr	Ser	Pro	Leu	Asn
		35					40					45			
Ala	Glu	Val	Val	Gln	Tyr	Ala	Lys	Glu	Val	Val	Asp	Phe	Ser	Ser	His
	50					55					60				
Tyr	Gly	Ser	Glu	Asn	Ser	Met	Ser	Tyr	Thr	Met	Trp	Asn	Leu	Ala	Gly
65					70					75				80	
Val	Pro	Asn	Val	Phe	Pro	Ser	Ser	Gly	Asp	Phe	Thr	Gln	Thr	Ala	Val
			85						90					95	
Phe	Arg	Thr	Tyr	Gly	Thr	Trp	Trp	Asp	Gln	Cys	Pro	Ser	Ala	Ser	Leu
		100						105					110		
Pro	Phe	Lys	Arg	Thr	Pro	Pro	Asn	Phe	Gln	Ser	Gln	Asp	Tyr	Val	Glu
		115					120					125			
Leu	Thr	Phe	Glu	Gln	Gln	Val	Tyr	Pro	Thr	Ala	Val	His	Val	Leu	Glu
	130					135					140				
Thr	Tyr	His	Pro	Gly	Ala	Val	Ile	Arg	Ile	Leu	Ala	Cys	Ser	Ala	Asn
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Pro	Tyr	Ser	Pro	Asn	Pro	Pro	Ala	Glu	Val	Arg	Trp	Glu	Ile	Leu	Trp

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Ser	Glu	Arg	Pro	Thr	Lys	Val	Asn	Ala	Ser	Gln	Ala	Arg	Gln	Phe	Lys					
180										185					190					
Pro	Cys	Ile	Lys	Gln	Ile	Asn	Phe	Pro	Thr	Asn	Leu	Ile	Arg	Leu	Glu					
195										200					205					
Val	Asn	Ser	Ser	Leu	Leu	Glu	Tyr	Tyr	Thr	Glu	Leu	Asp	Ala	Val	Val					
210										215					220					
Leu	His	Gly	Val	Lys	Asp	Lys	Pro	Val	Leu	Ser	Leu	Lys	Thr	Ser	Leu					
225	230										235					240				
Ile	Asp	Met	Asn	Asp	Ile	Glu	Asp	Asp	Ala	Tyr	Ala	Glu	Lys	Asp	Gly					
245										250					255					
Cys	Gly	Met	Asp	Ser	Leu	Asn	Lys	Lys	Phe	Ser	Ser	Ala	Val	Leu	Gly					
260										265					270					
Glu	Gly	Pro	Asn	Asn	Gly	Tyr	Phe	Asp	Lys	Leu	Pro	Tyr	Glu	Leu	Ile					
275										280					285					
Gln	Leu	Ile	Leu	Asn	His	Leu	Thr	Leu	Pro	Asp	Leu	Cys	Arg	Leu	Ala					
290										295					300					
Gln	Thr	Cys	Lys	Leu	Leu	Ser	Gln	His	Cys	Cys	Asp	Pro	Leu	Gln	Tyr					
305	310										315					320				
Ile	His	Leu	Asn	Leu	Gln	Pro	Tyr	Trp	Ala	Lys	Leu	Asp	Asp	Thr	Ser					
325										330					335					
Leu	Glu	Phe	Leu	Gln	Ser	Arg	Cys	Thr	Leu	Val	Gln	Trp	Leu	Asn	Leu					
340										345					350					
Ser	Trp	Thr	Gly	Asn	Arg	Gly	Phe	Ile	Ser	Val	Ala	Gly	Phe	Ser	Arg					
355										360					365					
Phe	Leu	Lys	Val	Cys	Gly	Ser	Glu	Leu	Val	Arg	Leu	Glu	Leu	Ser	Cys					
370										375					380					
Ser	His	Phe	Leu	Asn	Glu	Thr	Cys	Leu	Glu	Val	Ile	Ser	Glu	Met	Cys					
385	390										395					400				
Pro	Asn	Leu	Gln	Ala	Leu	Asn	Leu	Ser	Ser	Cys	Asp	Lys	Leu	Pro	Pro					
405										410					415					
Gln	Ala	Phe	Asn	His	Ile	Ala	Lys	Leu	Cys	Ser	Leu	Lys	Arg	Leu	Val					
420										425					430					
Leu	Tyr	Arg	Thr	Lys	Val	Glu	Gln	Thr	Ala	Leu	Leu	Ser	Ile	Leu	Asn					
435										440					445					
Phe	Cys	Ser	Glu	Leu	Gln	His	Leu	Ser	Leu	Gly	Ser	Cys	Val	Met	Ile					
450										455					460					
Glu	Asp	Tyr	Asp	Val	Ile	Ala	Ser	Met	Ile	Gly	Ala	Lys	Cys	Lys	Lys					
465	470										475					480				
Leu	Arg	Thr	Leu	Asp	Leu	Trp	Arg	Cys	Lys	Asn	Ile	Thr	Glu	Asn	Gly					
485										490					495					
Ile	Ala	Glu	Leu	Ala	Ser	Gly	Cys	Pro	Leu	Leu	Glu	Glu	Leu	Asp	Leu					
500										505					510					
Gly	Trp	Cys	Pro	Thr	Leu	Gln	Ser	Ser	Thr	Gly	Cys	Phe	Thr	Arg	Leu					
515										520					525					
Ala	His	Gln	Leu	Pro	Asn	Leu	Gln	Lys	Leu	Phe	Leu	Thr	Ala	Asn	Arg					
530										535					540					
Ser	Val	Cys	Asp	Thr	Asp	Ile	Asp	Glu	Leu	Ala	Cys	Asn	Cys	Thr	Arg					
545	550										555					560				
Leu	Gln	Gln	Leu	Asp	Ile	Leu	Gly	Thr	Arg	Met	Val	Ser	Pro	Ala	Ser					
565										570					575					
Leu	Arg	Lys	Leu	Leu	Glu	Ser	Cys	Lys	Asp	Leu	Ser	Leu	Leu	Asp	Val					
580										585					590					
Ser	Phe	Cys	Ser	Gln	Ile	Asp	Asn	Arg	Ala	Val	Leu	Glu	Leu	Asn	Ala					

Ser Phe Pro Lys Val Phe Ile Lys Lys Ser Phe Thr Gln
610 615 620

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<210> 6195
<211> 518
<212> DNA
<213> Homo sapiens
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120
gtttccactt ctgctgtcaa gaaccacaag ggtcaagccc catccctaca aataccaagt
180
acatccaaat tcttcaactg cacagaaatg gtgttacatc cactgggaac aaacctgcat
240
ccccaccca aggcatgtga caacagggac tgctaattgag ctttgtccgg gtaactcatt
300
cacgccatca tcttgctctt tccatagtca cttattaagc aaaaactatg caaaaaacta
360
tgtcagcac cgcacaggat ggtaaaatgc cctgaggggc ccccccatc tgactccggt
420
tgagcggagt gggcagccct gcctgggagc tccagcctcc tgcaccacg tgcccccttg
480
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518

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<210> 6196
<211> 117
<212> PRT
<213> Homo sapiens
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<400> 6196
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  1                      5                      10                      15
Arg Pro Val Leu Cys Ser Pro Ser Trp Phe Pro Gly Glu Lys Phe Pro
      20                      25                      30
Leu Leu Leu Ser Arg Thr Thr Arg Val Lys Pro His Pro Tyr Lys Tyr
      35                      40                      45
Gln Val His Pro Asn Ser Ser Leu Ala Gln Lys Trp Cys Tyr Ile His
      50                      55                      60
Trp Glu Gln Thr Cys Ile Pro Thr Pro Arg His Val Thr Thr Gly Thr
65                      70                      75                      80
Ala Asn Glu Leu Cys Pro Gly Asn Ser Phe Thr Pro Ser Ser Cys Ser
      85                      90                      95
Phe His Ser His Leu Leu Ser Thr Asn Tyr Ala Lys Asn Tyr Val Gln
      100                      105                      110
His Arg Thr Gly Trp
      115

```

<210> 6197
<211> 2841

<212> DNA

<213> Homo sapiens

<400> 6197

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120
aataccaggt acagcctttc cccgctcatc cagagcagga caaacaggcc aggtggtatc
180
aggagcccag gtctccagct ggaggggaatg tcaaccctgc agtgggagca ggggcccac
240
acgcataccta ggcacagatg ctaatgcagg cactgcagggt aagctgggct tggatatcctt
300
ccctggcttc agaaagaagc caacaaggag cgttttgcag aatgaaacct ttgtttccag
360
aagcactgct gactgtaagt ggttgccgtt tgtggcagtg agcattttgt ccattctgag
420
gttggtattg tttctccttt tggccttgcc ctgccctaca gaccataaag gagaacagca
480
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540
gtcatgttct gggagggcta aggcatacaag taaggcctgt ggggctggag gatcacaggg
600
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660
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720
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960
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 2841

<210> 6198

<211> 124

<212> PRT

<213> Homo sapiens

<400> 6198

Met Gly Ala Ser His Gly Asn Trp Glu Val Pro Arg Gln Ser Gln Arg

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	20	25	30
Ser Ser Gln His His Gly Leu Asn Thr His Trp Ala Pro Thr Leu Gly			
	35	40	45
Pro Gly Trp Gly Met Trp Gly Gln Glu Ala Ala Gln Ser Gly Arg Gln			
	50	55	60
Arg Glu Lys Cys Val Gln Arg Ala Pro Ile Ser Gly Cys Asn Val Val			
65		70	75
Leu Arg Leu Trp Leu Gly Ser Ala Ser Arg Val Ser Tyr Val Leu Cys			
	85	90	95
Ser Tyr Phe Leu Ser Pro Thr Leu Pro Cys Arg Asn Pro Ser Glu Tyr			
	100	105	110
Val Ala Thr Ile Leu Glu Leu Ser Ala Leu Ile Val			
	115	120	

<210> 6199

<211> 1777

<212> DNA

<213> Homo sapiens

<400> 6199

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 120
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 780
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 1020
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 1777

<210> 6200

<211> 164

<212> PRT

<213> Homo sapiens

<400> 6200

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Phe	Trp	Glu	Glu	Gly	Ser	Ala	Pro	Arg	Pro	Gln	Glu	Ser	Arg	Gln	Arg
			20					25					30		
Pro	Pro	Lys	Pro	Asp	Cys	Gln	Gln	Lys	Pro	Ser	Pro	Ser	Glu	Gly	Gln
			35					40					45		
Val	Gly	Val	Pro	Xaa	Arg	Ser	Pro	His	Pro	Gln	Gly	Gly	Phe	Thr	His
		50				55					60				
Cys	Pro	Val	Pro	Gly	Met	Pro	Gly	Gly	Arg	Pro	Leu	Cys	Cys	Cys	His
65					70				75					80	
Cys	Cys	Gln	His	Cys	Pro	Ala	Cys	Glu	Ala	Arg	Arg	Ser	Pro	Cys	Pro
				85				90						95	
Thr	Arg	Cys	Cys	Cys	Ser	Ser	Asp	Pro	Cys	Cys	Glu	Glu	Trp	Asp	Ser
			100					105					110		
Trp	Ser	Lys	Lys	Leu	Val	Phe	Leu	Phe	Cys	Ile	Asn	Glu	Lys	Asn	Pro
		115					120					125			
Gly	Glu	Ala	Ala	Thr	Leu	Pro	Ser	Gln	Arg	Asp	Ala	Leu	Pro	Cys	Phe
		130				135					140				
Gly	Val	Leu	Ser	Pro	Phe	Pro	Pro	Leu	Val	Gln	Gly	Gln	Pro	Ser	Arg

145
Ser Ser Trp Phe

150

155

160

<210> 6201

<211> 604

<212> DNA

<213> Homo sapiens

<400> 6201

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120
ccaggacaag accagccctg atgggagaag ccaggaggacc cagaggaact tccaggaggc
180
ccttagctcc ctcagacaga atgcgggatc gcaatgccca gcaaaggga attcaaggac
240
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360
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420
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480
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600
gccg
604

<210> 6202

<211> 124

<212> PRT

<213> Homo sapiens

<400> 6202

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Pro	Ser	Asp	Arg	Met	Arg	Asp	Arg	Asn	Ala	Gln	Gln	Arg	Ala	Ile	Gln
		20					25						30		
Gly	Gln	Trp	Thr	Leu	Gly	Arg	Gly	Ala	Glu	Trp	Ala	Ala	Leu	Arg	Arg
		35				40						45			
Ala	Gly	Leu	Arg	Gly	Cys	Arg	Glu	Glu	Phe	Gly	Gly	Lys	Gly	Gln	Pro
		50			55					60					
Gln	Ser	Leu	Ser	Cys	Ala	Ser	Trp	Glu	Arg	Gly	Met	Thr	Gly	Arg	His
		65			70				75					80	
Thr	Asn	Val	Ser	Gln	Gly	Arg	Trp	Ala	Trp	Gly	His	Arg	Ala	Pro	Arg
				85				90						95	
Gly	Gly	Ser	Gly	Glu	Gly	Glu	Pro	Ala	Glu	Glu	Arg	Pro	Gly	Arg	Ala
			100				105						110		
Gly	Asp	His	Ala	Gly	Ala	Gln	Gly	Glu	Arg	Gln	Asp				

115

120

<210> 6203
<211> 3462
<212> DNA
<213> Homo sapiens

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 Arg Trp Arg Gln Leu Val Glu Lys Gly Pro Gln Tyr Gly Thr Val Glu
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<212> DNA

<213> Homo sapiens

<400> 6205

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<212> PRT

<213> Homo sapiens

<400> 6206

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<210> 6207

<211> 1384

<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 6208

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<211> 165

<212> PRT

<213> Homo sapiens

<400> 6210

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Lys	Pro	Pro	Cys	Ser	Glu	Gly	Ser	Pro	Trp	Arg	Cys	Pro	His	Phe	Thr
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Cys	Trp	Val	Leu	Gln	Ala	Arg	Lys	Pro	Gly	Ser	Gly	Gly	Thr	Arg	Glu
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<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 6212

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 115 120 125
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 130 135 140
 Gln Glu Asp Pro Glu Asp Leu Asp Gly Ser Val Gln Gly Val Lys Pro
 145 150 155 160
 Gln Lys Ala Ala Ser Ser Thr Ser Ser Gly Ser His His Ser Ser His
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<210> 6213

<211> 1160

<212> DNA

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<400> 6213

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<213> Homo sapiens

<400> 6214

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 Pro Pro Pro Pro Thr Pro Pro Thr Cys Ile Ala Gln Ile Gln
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 <212> DNA
 <213> Homo sapiens

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 <213> Homo sapiens

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 35 40 45
 Leu Gln Glu Ser Asp Ala Ala Pro Leu Pro Leu Ser Cys His Leu Ala
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<210> 6217
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 <213> Homo sapiens

<400> 6217

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<211> 133

<212> PRT

<213> Homo sapiens

<400> 6218

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<210> 6219

<211> 2495

<212> DNA

<213> Homo sapiens

<400> 6219

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 <212> PRT
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 Gly Gly Pro Ala Pro Ser Pro Gln Xaa Tyr Ile His Asp Ser Pro Ser
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 Cys Trp Pro Trp Thr Lys Ala Gly Ser Ser Xaa Cys Pro Val Arg Ser
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 Pro Tyr Ser Pro Pro Ala Ala Arg Pro Gly Pro Gly Xaa Pro Leu Trp
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 Cys Gln Arg Val Ser Gln Asn Pro Gly Pro Ser Pro Ser Xaa Gly Pro
 100 105 110
 Leu Pro Ser Pro Arg Pro Val Cys Trp Asp Gly Ala Ser Thr Leu Arg
 115 120 125
 Leu Val Lys Ala Glu Leu Asn Ser Ser Asn Glu Ser Ala Gly Trp Ala
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<210> 6221
 <211> 1487
 <212> DNA
 <213> Homo sapiens

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<210> 6222

<211> 330

<212> PRT

<213> Homo sapiens

<400> 6222

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Pro Tyr Arg Cys His Asp Cys Gly Lys Cys Phe Arg Gln Leu Ala Tyr					
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Leu Val Glu His Lys Arg Ile His Thr Lys Glu Lys Pro Tyr Lys Cys					
	180		185		190
Ser Lys Cys Glu Lys Thr Phe Ser Gln Asn Ser Thr Leu Ile Arg His					
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Gln Val Ile His Ser Gly Glu Lys Arg His Lys Cys Leu Glu Cys Gly					
	210		215		220
Lys Ala Phe Gly Arg His Ser Thr Leu Leu Cys His Gln Gln Ile His					
225		230		235	240
Ser Lys Pro Asn Thr His Lys Cys Ser Glu Cys Gly Gln Ser Phe Gly					
	245		250		255
Arg Asn Val Asp Leu Ile Gln His Gln Arg Ile His Thr Lys Glu Glu					
	260		265		270
Phe Phe Gln Cys Gly Glu Cys Gly Lys Thr Phe Ser Phe Lys Arg Asn					
	275		280		285
Leu Phe Arg His Gln Val Ile His Thr Gly Ser Gln Leu Tyr Gln Cys					
	290		295		300
Val Ile Cys Gly Lys Ser Phe Lys Trp His Thr Ser Phe Ile Lys His					
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Gln Gly Thr His Lys Gly Gln Ile Ser Thr					
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<210> 6223

<211> 944

<212> DNA

<213> Homo sapiens

<400> 6223

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120

ccccaaacttc ccatacccccc actcctctcc attcctcttc ttgcttgtgc gcataagcaa
180

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240

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300

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ataagcccca cacctcagct gggggcagca tcaagcgagc aaggccatgt tggccaagga
420

gctccaggcc tcatgggtaa tatgaacctt gagggcggtg tgaaccacga gaacggcatg
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<210> 6224
 <211> 156
 <212> PRT
 <213> Homo sapiens

<400> 6224
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 35 40 45
 Asn Pro Glu Gly Gly Val Asn His Glu Asn Gly Met Asn Arg Asp Gly
 50 55 60
 Gly Met Ile Pro Glu Gly Gly Gly Gly Asn Gln Glu Pro Arg Gln Gln
 65 70 75 80
 Pro Gln Pro Pro Pro Glu Glu Pro Ala Gln Ala Ala Met Glu Gly Pro
 85 90 95
 Gln Pro Glu Asn Met Gln Pro Arg Thr Arg Arg Thr Lys Phe Thr Leu
 100 105 110
 Leu Gln Val Glu Glu Leu Glu Ser Val Phe Arg His Thr Gln Tyr Pro
 115 120 125
 Asp Val Pro Thr Arg Arg Glu Leu Ala Glu Asn Leu Gly Val Thr Glu
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 Asp Lys Val Arg Val Ser Thr Leu Glu Lys Ala Ile
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<210> 6225
 <211> 3851
 <212> DNA
 <213> Homo sapiens

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<210> 6226

<211> 246

<212> PRT

<213> Homo sapiens

<400> 6226

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Gln	Gly	Asp	Phe	Ile	Lys	Cys	Val	Glu	Gln	Lys	Thr	Asp	Ala	Leu	Gly
		35				40					45				
Lys	Gln	Ser	Val	Asn	Arg	Gly	Phe	Thr	Lys	Asp	Lys	Thr	Leu	Ser	Ser
		50				55					60				
Ile	Phe	Asn	Ile	Glu	Met	Val	Lys	Glu	Lys	Thr	Ala	Glu	Glu	Ile	Lys
65					70					75				80	
Gln	Ile	Trp	Gln	Gln	Tyr	Phe	Ala	Ala	Lys	Asp	Thr	Val	Tyr	Ala	Val
			85					90					95		
Ile	Pro	Ala	Glu	Lys	Phe	Asp	Leu	Ile	Trp	Asn	Arg	Ala	Gln	Ser	Cys
		100						105					110		
Pro	Thr	Phe	Leu	Cys	Ala	Leu	Pro	Arg	Arg	Glu	Gly	Tyr	Glu	Phe	Phe
		115						120				125			
Val	Gly	Gln	Trp	Thr	Gly	Thr	Glu	Leu	His	Phe	Thr	Ala	Leu	Ile	Asn
		130				135					140				
Ile	Gln	Thr	Arg	Gly	Glu	Ala	Ala	Ala	Ser	Gln	Leu	Ile	Leu	Tyr	His
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Tyr	Pro	Glu	Leu	Lys	Glu	Glu	Lys	Gly	Ile	Val	Leu	Met	Thr	Ala	Glu
			165					170					175		
Met	Asp	Ser	Thr	Phe	Leu	Asn	Val	Ala	Glu	Ala	Gln	Cys	Ile	Ala	Asn
		180						185				190			
Gln	Val	Gln	Leu	Phe	Tyr	Ala	Thr	Asp	Arg	Lys	Glu	Thr	Tyr	Gly	Leu
		195						200				205			
Val	Glu	Thr	Phe	Asn	Leu	Arg	Pro	Asn	Glu	Phe	Lys	Tyr	Met	Ser	Val
		210				215					220				
Ile	Ala	Glu	Leu	Glu	Gln	Ser	Gly	Leu	Gly	Ala	Glu	Leu	Lys	Cys	Ala
225					230					235				240	
Gln	Asn	Gln	Asn	Lys	Thr										

245

<210> 6227

<211> 830

<212> DNA

<213> Homo sapiens

<400> 6227

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 360
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 420
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 660
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 720
 cggcctgtga aaaagacgat ggaaattccg aaagattcct tgcagaagta cctcaaagac
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<210> 6228

<211> 271

<212> PRT

<213> Homo sapiens

<400> 6228

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		20					25					30			
Ile	Pro	Ser	Pro	Gly	Arg	Val	Ala	Glu	Trp	Glu	Val	Gln	Asn	Arg	
		35				40				45					
Ile	Pro	Ser	Gly	Thr	Ile	Leu	Lys	Ala	Leu	Met	Glu	Gly	Gly	Glu	Asn
	50				55			60							
Gly	Pro	Trp	Met	Arg	Phe	Met	Arg	Ala	Glu	Ile	Thr	Ala	Glu	Gly	Phe
65			70				75					80			
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<210> 6229
<211> 3105
<212> DNA
<213> Homo sapiens
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720

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<210> 6230

<211> 944

<212> PRT

<213> Homo sapiens

<400> 6230

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Pro	Asp	Arg	Trp	Asn	Ser	Ala	Phe	Thr	Arg	Lys	Asp	Glu	Ile	Thr
		20						25				30		
Ser	Leu	Val	Ser	Ala	Leu	Asp	Ser	Met	Cys	Ser	Ala	Leu	Ser	Lys
		35					40					45		
Asn	Ala	Glu	Val	Ala	Cys	Val	Ala	Val	His	Asp	Glu	Ser	Ala	Phe
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Val	Gly	Thr	Glu	Lys	Gly	Arg	Met	Phe	Leu	Asn	Ala	Arg	Lys	Glu
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Gln	Ser	Asp	Phe	Leu	Arg	Phe	Cys	Arg	Gly	Pro	Pro	Trp	Lys	Asp
		85						90				95		
Glu	Ala	Glu	His	Pro	Lys	Lys	Val	Gln	Arg	Gly	Glu	Gly	Gly	Arg
		100						105				110		
Ser	Leu	Pro	Arg	Ser	Ser	Leu	Glu	His	Gly	Ser	Asp	Val	Tyr	Leu
		115				120					125			
Arg	Lys	Met	Val	Glu	Glu	Val	Phe	Asp	Val	Leu	Tyr	Ser	Glu	Ala
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Pro	Gly	Leu	Leu	Ala	Val	Gln	Gly	Leu	Pro	Glu	Gly	Leu	Ala	Phe
														Arg

5414

595					600					605					
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Lys	Ile	Leu	Glu	Ala	Ser	Asn	Ser	Ile	Gln	Phe	Val	Ile	Lys	Arg	Pro
625					630					635					
Glu	Leu	Leu	Thr	Glu	Gly	Val	Lys	Glu	Pro	Ile	Val	Asp	Ser	Gln	Glu
645					650					655					
Arg	Asp	Ser	Gly	Asp	Pro	Leu	Val	Asp	Glu	Ser	Leu	Lys	Arg	Gln	Gly
660					665					670					
Phe	Gln	Glu	Asn	Tyr	Asp	Ala	Arg	Leu	Ser	Arg	Ile	Asp	Ile	Ala	Asn
675					680					685					
Thr	Leu	Arg	Glu	Gln	Val	Gln	Asp	Leu	Phe	Asn	Lys	Lys	Tyr	Gly	Glu
690					695					700					
Ala	Leu	Gly	Ile	Lys	Tyr	Pro	Val	Gln	Val	Pro	Tyr	Lys	Arg	Ile	Lys
705					710					715					
Ser	Asn	Pro	Gly	Ser	Val	Ile	Ile	Glu	Gly	Leu	Pro	Pro	Gly	Ile	Pro
725					730					735					
Phe	Arg	Lys	Pro	Cys	Thr	Phe	Gly	Ser	Gln	Asn	Leu	Glu	Arg	Ile	Leu
740					745					750					
Ala	Val	Ala	Asp	Lys	Ile	Lys	Phe	Thr	Val	Thr	Arg	Pro	Phe	Gln	Gly
755					760					765					
Leu	Ile	Pro	Lys	Pro	Asp	Glu	Asp	Asp	Ala	Asn	Arg	Leu	Gly	Glu	Lys
770					775					780					
Val	Ile	Leu	Arg	Glu	Gln	Val	Lys	Glu	Leu	Phe	Asn	Glu	Lys	Tyr	Gly
785					790					795					
Glu	Ala	Leu	Gly	Leu	Asn	Arg	Pro	Val	Leu	Val	Pro	Tyr	Lys	Leu	Ile
805					810					815					
Arg	Asp	Ser	Pro	Asp	Ala	Val	Glu	Val	Thr	Gly	Leu	Pro	Asp	Asp	Ile
820					825					830					
Pro	Phe	Arg	Asn	Pro	Asn	Thr	Tyr	Asp	Ile	His	Arg	Leu	Glu	Lys	Ile
835					840					845					
Leu	Lys	Ala	Arg	Glu	His	Val	Arg	Met	Val	Ile	Ile	Asn	Gln	Leu	Gln
850					855					860					
Pro	Phe	Ala	Glu	Ile	Cys	Asn	Asp	Ala	Lys	Val	Pro	Ala	Lys	Asp	Ser
865					870					875					
Ser	Ile	Pro	Lys	Arg	Lys	Arg	Lys	Arg	Val	Ser	Glu	Gly	Asn	Ser	Val
885					890					895					
Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Asn	Pro	Asp	Ser
900					905					910					
Val	Ala	Ser	Ala	Asn	Gln	Ile	Ser	Leu	Val	Gln	Trp	Pro	Met	Tyr	Met
915					920					925					
Val	Asp	Tyr	Ala	Gly	Leu	Asn	Val	Gln	Leu	Pro	Gly	Pro	Leu	Asn	Tyr
930					935					940					

<210> 6231

<211> 471

<212> DNA

<213> Homo sapiens

<400> 6231

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60

taccaatgac aggcctact cacagccact gactccagc ttgggcgaca gaacgaggcc

120

ttgccttttt aaaaaaaaaa aaaaggtca aaaaaagagt atgctgggccc aaaaatctgg
 180
 cccctcaggc ctcctgacct ggaggagaaa aagggggccc aagccccccg ttgccccat
 240
 ctccatatgg aatggcaciaa cccctcgagg ggaaccccc cctaaccata gttctaaaaa
 300
 ggggacaaaa aaatggggcg tggatttttc aacgccggaa acccaattcc caccacctgg
 360
 ccggccgttc ttagggattc caacttggga cccaacctgg gcgtattctg ggccttactt
 420
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<210> 6232

<211> 138

<212> PRT

<213> Homo sapiens

<400> 6232

Met	Ser	Thr	Asn	Asp	Arg	Pro	Tyr	Ser	Gln	Pro	Leu	His	Ser	Ser	Leu
1				5					10					15	
Gly	Asp	Arg	Thr	Arg	Pro	Cys	Leu	Phe	Lys	Lys	Lys	Lys	Lys	Ala	Gln
			20					25						30	
Lys	Lys	Ser	Met	Leu	Gly	Gln	Lys	Ser	Gly	Pro	Ser	Gly	Leu	Leu	Thr
		35				40							45		
Trp	Arg	Arg	Lys	Arg	Gly	Pro	Lys	Pro	Pro	Val	Ala	Pro	Ile	Ser	Ile
	50					55					60				
Trp	Asn	Gly	Thr	Thr	Pro	Arg	Gly	Glu	Pro	Pro	Pro	Asn	His	Ser	Ser
65					70					75				80	
Lys	Lys	Gly	Thr	Lys	Lys	Trp	Ala	Leu	Asp	Phe	Ser	Thr	Pro	Glu	Thr
				85					90					95	
Gln	Phe	Pro	Pro	Pro	Gly	Arg	Pro	Phe	Leu	Gly	Ile	Pro	Thr	Trp	Asp
			100					105					110		
Pro	Thr	Trp	Ala	Tyr	Ser	Gly	Pro	Tyr	Leu	Phe	Leu	Val	Gly	Ile	Gly
		115					120					125			
Ile	Pro	Phe	Pro	Phe	Pro	Pro	Pro	Ser	Asn						
		130					135								

<210> 6233

<211> 894

<212> DNA

<213> Homo sapiens

<400> 6233

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 120
 agggaaggag acgattggag tcaactcaat gtgctcaaaa aaagaagagt cggggacctc
 180
 ctaccagtt acattccaga ggatgaggcg ctgatgcttc gggatggacg ctttgcttgt
 240
 gccatctgcc cccatcgacc ggtactggac accctggcca tgctgactgc ccaccgtgca
 300

ggcaagaaac atctgtccag cttgcagctt ttctatggca agaagcagcc gggaaaggaa
 360
 agaaagcaga atccaaaaca tcagaatgaa ttgagaaggg aagaaaccaa agctgaggct
 420
 cctctgctaa ctacagacag acttatcacc cagagtgtct tgcacagagc tccccactat
 480
 aacagttgct gccgccggaa gtacagacca gaagcccctg gtccctctgt ctccctttcc
 540
 cctatgccac cctcagaggt caaactccaa agtgggaaga tcagtaggga acctgaacct
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 660
 acaagaagac gagccctgga ccattatctc acccttcgaa gctctggatg gatcccagat
 720
 ggacgaggtc gatgggtaaa agatgaaaat gttgagtttg actctgatga ggaggaacca
 780
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 840
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 894

<210> 6234

<211> 230

<212> PRT

<213> Homo sapiens

<400> 6234

Met	Ser	Phe	Lys	Arg	Glu	Gly	Asp	Asp	Trp	Ser	Gln	Leu	Asn	Val	Leu
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Lys	Lys	Arg	Arg	Val	Gly	Asp	Leu	Leu	Ala	Ser	Tyr	Ile	Pro	Glu	Asp
			20				25						30		
Glu	Ala	Leu	Met	Leu	Arg	Asp	Gly	Arg	Phe	Ala	Cys	Ala	Ile	Cys	Pro
		35				40					45				
His	Arg	Pro	Val	Leu	Asp	Thr	Leu	Ala	Met	Leu	Thr	Ala	His	Arg	Ala
	50				55					60					
Gly	Lys	Lys	His	Leu	Ser	Ser	Leu	Gln	Leu	Phe	Tyr	Gly	Lys	Lys	Gln
65			70						75					80	
Pro	Gly	Lys	Glu	Arg	Lys	Gln	Asn	Pro	Lys	His	Gln	Asn	Glu	Leu	Arg
			85				90						95		
Arg	Glu	Glu	Thr	Lys	Ala	Glu	Ala	Pro	Leu	Leu	Thr	Gln	Thr	Arg	Leu
			100				105						110		
Ile	Thr	Gln	Ser	Ala	Leu	His	Arg	Ala	Pro	His	Tyr	Asn	Ser	Cys	Cys
		115				120						125			
Arg	Arg	Lys	Tyr	Arg	Pro	Glu	Ala	Pro	Gly	Pro	Ser	Val	Ser	Leu	Ser
	130				135					140					
Pro	Met	Pro	Pro	Ser	Glu	Val	Lys	Leu	Gln	Ser	Gly	Lys	Ile	Ser	Arg
145				150					155					160	
Glu	Pro	Glu	Pro	Ala	Ala	Gly	Pro	Gln	Ala	Glu	Glu	Ser	Ala	Thr	Val
			165				170						175		
Ser	Ala	Pro	Ala	Pro	Met	Ser	Pro	Thr	Arg	Arg	Arg	Ala	Leu	Asp	His
		180				185						190			
Tyr	Leu	Thr	Leu	Arg	Ser	Ser	Gly	Trp	Ile	Pro	Asp	Gly	Arg	Gly	Arg
	195					200					205				
Trp	Val	Lys	Asp	Glu	Asn	Val	Glu	Phe	Asp	Ser	Asp	Glu	Glu	Glu	Pro

210
Pro Asp Leu Pro Leu Asp
225 230

215

220

<210> 6235
<211> 3427
<212> DNA
<213> Homo sapiens

<400> 6235
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gtccgggact ttccgttcga gtcacatccc gagccccag agggcggcct gcccgggccc
120
tgggccctgc accgcggccg caagaaggcc acaggcagcc ccgtgtccat cttcgtctat
180
gatgtgaagc ctggcgcgga agagcagacc cagggtggca aagctgcctt caagcgcttc
240
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300
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360
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420
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480
gtggaccgag ctggcgagtg gaagcttggg ggctggact acatgtattc ggcccagggc
540
aacggtgggg gacctccccg caaggggatc cccgagcttg agcagtatga cccccggag
600
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660
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720
cctgggaaga tccccaaaac gctggtgccc cattactgtg agctggtggg agcaaaccac
780
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900
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960
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1020
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1080
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1140
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1260
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1320

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1980
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2100
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2160
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2220
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2460
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2520
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2700
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2940

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 3000
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 3060
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 3120
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 3180
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 3240
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 3300
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 3420
 gccggcc
 3427

<210> 6236

<211> 820

<212> PRT

<213> Homo sapiens

<400> 6236

Pro	Arg	Ala	Pro	Glu	Pro	Ala	Ala	Ala	Val	Gly	Thr	Met	Trp	Phe	Phe
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Ala	Arg	Asp	Pro	Val	Arg	Asp	Phe	Pro	Phe	Glu	Leu	Ile	Pro	Glu	Pro
			20					25					30		
Pro	Glu	Gly	Gly	Leu	Pro	Gly	Pro	Trp	Ala	Leu	His	Arg	Gly	Arg	Lys
			35				40					45			
Lys	Ala	Thr	Gly	Ser	Pro	Val	Ser	Ile	Phe	Val	Tyr	Asp	Val	Lys	Pro
	50					55				60					
Gly	Ala	Glu	Glu	Gln	Thr	Gln	Val	Ala	Lys	Ala	Ala	Phe	Lys	Arg	Phe
65					70					75				80	
Lys	Thr	Leu	Arg	His	Pro	Asn	Ile	Leu	Ala	Tyr	Ile	Asp	Gly	Leu	Glu
				85				90						95	
Thr	Glu	Lys	Cys	Leu	His	Val	Val	Thr	Glu	Ala	Val	Thr	Pro	Leu	Gly
			100					105					110		
Ile	Tyr	Leu	Lys	Ala	Arg	Val	Glu	Ala	Gly	Gly	Leu	Lys	Glu	Leu	Glu
			115				120					125			
Ile	Ser	Trp	Gly	Leu	His	Gln	Ile	Val	Lys	Ala	Leu	Ser	Phe	Leu	Val
	130				135					140					
Asn	Asp	Cys	Ser	Leu	Ile	His	Asn	Asn	Val	Cys	Met	Ala	Ala	Val	Phe
145					150					155				160	
Val	Asp	Arg	Ala	Gly	Trp	Lys	Leu	Gly	Gly	Leu	Asp	Tyr	Met	Tyr	
			165					170					175		
Ser	Ala	Gln	Gly	Asn	Gly	Gly	Gly	Pro	Pro	Arg	Lys	Gly	Ile	Pro	Glu
			180					185					190		
Leu	Glu	Gln	Tyr	Asp	Pro	Pro	Glu	Leu	Ala	Asp	Ser	Ser	Gly	Arg	Val
			195				200					205			
Val	Arg	Glu	Lys	Trp	Ser	Ala	Asp	Met	Trp	Arg	Leu	Gly	Cys	Leu	Ile
	210					215					220				
Trp	Glu	Val	Phe	Asn	Gly	Pro	Leu	Pro	Arg	Ala	Ala	Ala	Leu	Arg	Asn

225		230		235		240
Pro Gly Lys Ile	Pro Lys Thr Leu Val	Pro His Tyr Cys Glu Leu Val				
	245	250	255			
Gly Ala Asn Pro Lys Val Arg Pro Asn Pro Ala Arg Phe Leu Gln Asn						
	260	265	270			
Cys Arg Ala Pro Gly Gly Phe Met Ser Asn Arg Phe Val Glu Thr Asn						
	275	280	285			
Leu Phe Leu Glu Glu Ile Gln Ile Lys Glu Pro Ala Glu Lys Gln Lys						
	290	295	300			
Phe Phe Gln Glu Leu Ser Lys Ser Leu Asp Ala Phe Pro Glu Asp Phe						
305	310	315	320			
Cys Arg His Lys Val Leu Pro Gln Leu Leu Thr Ala Phe Glu Phe Gly						
	325	330	335			
Asn Ala Gly Ala Val Val Leu Thr Pro Leu Phe Lys Val Gly Lys Phe						
	340	345	350			
Leu Ser Ala Glu Glu Tyr Gln Gln Lys Ile Ile Pro Val Val Val Lys						
	355	360	365			
Met Phe Ser Ser Thr Asp Arg Ala Met Arg Ile Arg Leu Leu Gln Gln						
	370	375	380			
Met Glu Gln Phe Ile Gln Tyr Leu Asp Glu Pro Thr Val Asn Thr Gln						
385	390	395	400			
Ile Phe Pro His Val Val His Gly Phe Leu Asp Thr Asn Pro Ala Ile						
	405	410	415			
Arg Glu Gln Thr Val Lys Ser Met Leu Leu Leu Ala Pro Lys Leu Asn						
	420	425	430			
Glu Ala Asn Leu Asn Val Glu Leu Met Lys His Phe Ala Arg Leu Gln						
	435	440	445			
Ala Lys Asp Glu Gln Gly Pro Ile Arg Cys Asn Thr Thr Val Cys Leu						
	450	455	460			
Gly Lys Ile Gly Ser Tyr Leu Ser Ala Ser Thr Arg His Arg Val Leu						
465	470	475	480			
Thr Ser Ala Phe Ser Arg Ala Thr Arg Asp Pro Phe Ala Pro Ser Arg						
	485	490	495			
Val Ala Gly Val Leu Gly Phe Ala Ala Thr His Asn Leu Tyr Ser Met						
	500	505	510			
Asn Asp Cys Ala Gln Lys Ile Leu Pro Val Leu Cys Gly Leu Thr Val						
	515	520	525			
Asp Pro Glu Lys Ser Val Arg Asp Gln Ala Phe Lys Ala Ile Arg Ser						
	530	535	540			
Phe Leu Ser Lys Leu Glu Ser Val Ser Glu Asp Pro Thr Gln Leu Glu						
545	550	555	560			
Glu Val Glu Lys Asp Val His Ala Ala Ser Ser Pro Gly Met Gly Gly						
	565	570	575			
Ala Ala Ala Ser Trp Ala Gly Trp Ala Val Thr Gly Val Ser Ser Leu						
	580	585	590			
Thr Ser Lys Leu Ile Arg Ser His Pro Thr Thr Ala Pro Thr Glu Thr						
	595	600	605			
Asn Ile Pro Gln Arg Pro Thr Pro Glu Gly Val Pro Ala Pro Ala Pro						
	610	615	620			
Thr Pro Val Pro Ala Thr Pro Thr Thr Ser Gly His Trp Glu Thr Gln						
625	630	635	640			
Glu Glu Asp Lys Asp Thr Ala Glu Asp Ser Ser Thr Ala Asp Arg Trp						
	645	650	655			
Asp Asp Glu Asp Trp Gly Ser Leu Glu Gln Glu Ala Glu Ser Val Leu						

660 665 670
 Ala Gln Gln Asp Asp Trp Ser Thr Gly Gly Gln Val Ser Arg Ala Ser
 675 680 685
 Gln Val Ser Asn Ser Asp His Lys Ser Ser Lys Ser Pro Glu Ser Asp
 690 695 700
 Trp Ser Ser Trp Glu Ala Glu Gly Ser Trp Glu Gln Gly Trp Gln Glu
 705 710 715 720
 Pro Ser Ser Gln Glu Pro Pro Pro Asp Gly Thr Arg Leu Ala Ser Glu
 725 730 735
 Tyr Asn Trp Gly Gly Pro Glu Ser Ser Asp Lys Gly Asp Pro Phe Ala
 740 745 750
 Thr Leu Ser Ala Arg Pro Ser Thr Gln Pro Arg Pro Asp Ser Trp Gly
 755 760 765
 Glu Asp Asn Trp Glu Gly Leu Glu Thr Asp Ser Arg Gln Val Lys Ala
 770 775 780
 Glu Leu Ala Arg Lys Lys Arg Glu Glu Arg Arg Arg Glu Met Glu Ala
 785 790 795 800
 Lys Arg Ala Glu Arg Lys Val Ala Lys Gly Pro Met Lys Leu Gly Ala
 805 810 815
 Arg Lys Leu Asp
 820

<210> 6237

<211> 494

<212> DNA

<213> Homo sapiens

<400> 6237

cggcctggga ccatgggcgg acatgttccc gatttgaggt gaaacatgaa gagaaaatag
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 120
 tggcctttgt gagcctcagc ctgcagttct tccacctgat cccggtgtcg actcctaaga
 180
 atggaatgag tagcaagagt cgaaagagaa tcatgcccga ccctgtgacg gagccccctg
 240
 tgacagaccc cgtttatgaa gctcttttgt actgcaacat cccagcgtg gccgagcgca
 300
 gcatggaagg tcatgccccg catcatttta agctggtctc agtgcattgtg ttcattcgcc
 360
 acggagacag gtaccactg tatgtcattc ccaaaacaaa gcgaccagaa attgactgca
 420
 ctctggtggc taacaggaaa ccgtatcacc caaaactgga agctttcatt agtcacatgt
 480
 tgagaggatc cgga
 494

<210> 6238

<211> 141

<212> PRT

<213> Homo sapiens

<400> 6238

Met Leu Phe Arg Asn Arg Phe Leu Leu Leu Leu Ala Leu Ala Ala Leu

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Leu Ala Phe Val Ser Leu Ser Leu Gln Phe Phe His Leu Ile Pro Val			
20	25	30	
Ser Thr Pro Lys Asn Gly Met Ser Ser Lys Ser Arg Lys Arg Ile Met			
35	40	45	
Pro Asp Pro Val Thr Glu Pro Pro Val Thr Asp Pro Val Tyr Glu Ala			
50	55	60	
Leu Leu Tyr Cys Asn Ile Pro Ser Val Ala Glu Arg Ser Met Glu Gly			
65	70	75	80
His Ala Pro His His Phe Lys Leu Val Ser Val His Val Phe Ile Arg			
85	90	95	
His Gly Asp Arg Tyr Pro Leu Tyr Val Ile Pro Lys Thr Lys Arg Pro			
100	105	110	
Glu Ile Asp Cys Thr Leu Val Ala Asn Arg Lys Pro Tyr His Pro Lys			
115	120	125	
Leu Glu Ala Phe Ile Ser His Met Leu Arg Gly Ser Gly			
130	135	140	

<210> 6239

<211> 911

<212> DNA

<213> Homo sapiens

<400> 6239

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 120
 gcctgtgtcc tcaccaccgc cgcggtgcag ctggagctcc tcagccctt tcaactctac
 180
 ttcaaccgc accttgtgtt ccggaagttc caggtctgga ggctcgtcac caacttctc
 240
 ttcttcgggc ccctgggatt cagcttcttc ttcaacatgc tcttcgtgtt ccgctactgc
 300
 cgcctgctgg aagagggctc ctccgcggc cgcacggccg acttcgtctt catgtttctc
 360
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<210> 6240

<211> 235

<212> PRT

<213> Homo sapiens

<400> 6240

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Phe Arg Lys Phe Gln Val Trp Arg Leu Val Thr Asn Phe Leu Phe Phe
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Gly Pro Leu Gly Phe Ser Phe Phe Phe Asn Met Leu Phe Val Phe Arg
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Tyr Cys Arg Met Leu Glu Glu Gly Ser Phe Arg Gly Arg Thr Ala Asp
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Phe Val Phe Met Phe Leu Phe Gly Gly Val Leu Met Thr Leu Leu Gly
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Leu Leu Gly Ser Leu Phe Phe Leu Gly Gln Ala Leu Met Ala Met Leu
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Val Tyr Val Trp Ser Arg Arg Ser Pro Arg Val Arg Val Asn Phe Phe
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Gly Leu Leu Thr Phe Gln Ala Pro Phe Leu Pro Trp Ala Leu Met Gly
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Phe Ser Leu Leu Leu Gly Asn Ser Ile Leu Val Asp Leu Leu Gly Ile
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Ala Val Gly His Ile Tyr Tyr Phe Leu Glu Asp Val Phe Pro Asn Gln
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Pro Gly Gly Lys Arg Leu Leu Gln Thr Pro Gly Phe Leu Lys Leu Leu
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<213> Homo sapiens

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<211> 245

<212> PRT

<213> Homo sapiens

<400> 6242

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<212> DNA

<213> Homo sapiens

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<210> 6244

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35           40           45
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Glu Glu Glu Val Leu Ile Ile Leu Ser Gly Ser Glu Cys Ser Thr Cys
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<212> PRT

<213> Homo sapiens

<400> 6246

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Glu Ile Val Gln Leu	Arg Ser Glu Val	Asp His Leu Arg	Arg Glu Ile			
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Thr Glu Arg Glu Met	Gln Leu Thr Ser	Gln Lys Gln Thr	Met Glu Ala			
	275		280		285	
Leu Lys Thr Thr Cys	Thr Met Leu Glu	Glu Gln Val Met	Asp Leu Glu			
	290		295		300	
Ala Leu Asn Asp Glu	Leu Leu Glu Lys	Glu Arg Gln Trp	Glu Ala Trp			
305		310		315		320
Arg Ser Val Leu Gly	Asp Glu Lys Ser	Gln Phe Glu Cys	Arg Val Arg			
	325		330		335	
Glu Leu Gln Arg Met	Leu Asp Thr Glu	Lys Gln Ser Arg	Ala Arg Ala			
	340		345		350	
Asp Gln Arg Ile Thr	Glu Ser Arg Gln	Val Val Glu Leu	Ala Val Lys			
	355		360		365	
Glu His Lys Ala Glu	Ile Leu Ala Leu	Gln Gln Ala Leu	Lys Glu Gln			
	370		375		380	
Lys Leu Lys Ala Glu	Ser Leu Ser Asp	Lys Leu Asn Asp	Leu Glu Lys			
385		390		395		400
Lys His Ala Met Leu	Glu Met Asn Ala	Arg Ser Leu Gln	Gln Lys Leu			
	405		410		415	
Glu Thr Glu Arg Glu	Leu Lys Gln Arg	Leu Leu Glu Glu	Gln Ala Lys			
	420		425		430	
Leu Gln Gln Gln Met	Asp Leu Gln Lys	Asn His Ile Phe	Arg Leu Thr			
	435		440		445	
Gln Gly Leu Gln Glu	Ala Leu Asp Arg	Ala Asp Leu Leu	Lys Thr Glu			
	450		455		460	
Arg Ser Asp Leu Glu	Tyr Gln Leu Glu	Asn Ile Gln Val	Leu Tyr Ser			
465		470		475		480
His Glu Lys Val Lys	Met Glu Gly Thr	Ile Ser Gln Gln	Thr Lys Leu			
	485		490		495	
Ile Asp Phe Leu Gln	Ala Lys Met Asp	Gln Pro Ala Lys	Lys Lys Lys			
	500		505		510	
Val Pro Leu Gln Tyr	Asn Glu Leu Lys	Leu Ala Leu Glu	Lys Glu Lys			
	515		520		525	
Ala Arg Cys Ala Glu	Leu Glu Glu Ala	Leu Gln Lys Thr	Arg Ile Glu			
	530		535		540	
Leu Arg Ser Ala Arg	Glu Glu Ala Ala	His Arg Lys Ala	Thr Asp His			
545		550		555		560
Pro His Pro Ser Thr	Pro Ala Thr Ala	Arg Gln Gln Ile	Ala Met Ser			
	565		570		575	
Ala Ile Val Arg Ser	Pro Glu His Gln	Pro Ser Ala Met	Ser Leu Leu			

	580							585						590					
Ala	Pro	Pro	Ser	Ser	Arg	Arg	Lys	Glu	Ser	Ser	Thr	Pro	Glu	Glu	Phe				
		595					600					605							
Ser	Arg	Arg	Leu	Lys	Glu	Arg	Met	His	His	Asn	Ile	Pro	His	Arg	Phe				
	610					615					620								
Asn	Val	Gly	Leu	Asn	Met	Arg	Ala	Thr	Lys	Cys	Ala	Val	Cys	Leu	Asp				
625					630					635					640				
Thr	Val	His	Phe	Gly	Arg	Gln	Ala	Ser	Lys	Cys	Leu	Glu	Cys	Gln	Val				
				645					650					655					
Met	Cys	His	Pro	Lys	Cys	Ser	Thr	Cys	Leu	Pro	Ala	Thr	Cys	Gly	Leu				
			660					665					670						
Pro	Ala	Glu	Tyr	Ala	Thr	His	Phe	Thr	Glu	Ala	Phe	Cys	Arg	Asp	Lys				
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						695						700							
Leu	Glu	Gly	Trp	Met	Lys	Val	Pro	Arg	Asn	Asn	Lys	Arg	Gly	Gln	Gln				
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Gly	Trp	Asp	Arg	Lys	Tyr	Ile	Val	Leu	Glu	Gly	Ser	Lys	Val	Leu	Ile				
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Tyr	Asp	Asn	Glu	Ala	Arg	Glu	Ala	Gly	Gln	Arg	Pro	Val	Glu	Glu	Phe				
			740					745					750						
Glu	Leu	Cys	Leu	Pro	Asp	Gly	Asp	Val	Ser	Ile	His	Gly	Ala	Val	Gly				
		755					760					765							
Ala	Ser	Glu	Leu	Ala	Asn	Thr	Ala	Lys	Ala	Asp	Val	Pro	Tyr	Ile	Leu				
						775						780							
Lys	Met	Glu	Ser	His	Pro	His	Thr	Thr	Cys	Trp	Pro	Gly	Arg	Thr	Leu				
785					790					795					800				
Tyr	Leu	Leu	Ala	Pro	Ser	Phe	Pro	Asp	Lys	Gln	Arg	Trp	Val	Thr	Ala				
				805					810					815					
Leu	Glu	Ser	Val	Val	Ala	Gly	Gly	Arg	Val	Ser	Arg	Glu	Lys	Ala	Glu				
			820					825					830						
Ala	Asp	Ala	Lys	Leu	Leu	Gly	Asn	Ser	Leu	Leu	Lys	Leu	Glu	Gly	Asp				
		835					840					845							
Asp	Arg	Leu	Asp	Met	Asn	Cys	Thr	Leu	Pro	Phe	Ser	Asp	Gln	Val	Val				
						855						860							
Leu	Val	Gly	Thr	Glu	Glu	Gly	Leu	Tyr	Ala	Leu	Asn	Val	Leu	Lys	Asn				
865					870					875					880				
Ser	Leu	Thr	His	Val	Pro	Gly	Ile	Gly	Ala	Val	Phe	Gln	Ile	Tyr	Ile				
				885					890					895					
Ile	Lys	Asp	Leu	Glu	Lys	Leu	Leu	Met	Ile	Ala	Gly	Glu	Glu	Arg	Ala				
			900					905					910						
Leu	Cys	Leu	Val	Asp	Val	Lys	Lys	Val	Lys	Gln	Ser	Leu	Ala	Gln	Ser				
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His	Leu	Pro	Ala	Gln	Pro	Asp	Ile	Ser	Pro	Asn	Ile	Phe	Glu	Ala	Val				
						935						940							

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      1010              1015              1020
Asp Lys Asn Asp His Ser Leu Ala Pro Ala Val Phe Ala Ala Ser Ser
1025              1030              1035              1040
Asn Ser Phe Pro Val Ser Ile Val Gln Val Asn Ser Ala Gly Gln Arg
      1045              1050              1055
Glu Glu Tyr Leu Leu Cys Phe His Glu Phe Gly Val Phe Val Asp Ser
      1060              1065              1070
Tyr Gly Arg Arg Ser Arg Thr Asp Asp Leu Lys Trp Ser Arg Leu Pro
      1075              1080              1085
Leu Ala Phe Ala Tyr Arg Glu Pro Tyr Leu Phe Val Thr His Phe Asn
      1090              1095              1100
Ser Leu Glu Val Ile Glu Ile Gln Ala Arg Ser Ser Ala Gly Thr Pro
1105              1110              1115              1120
Ala Arg Ala Tyr Leu Asp Ile Pro Asn Pro Arg Tyr Leu Gly Pro Ala
      1125              1130              1135
Ile Ser Ser Gly Ala Ile Tyr Leu Ala Ser Ser Tyr Gln Asp Lys Leu
      1140              1145              1150
Arg Val Ile Cys Cys Lys Gly Asn Leu Val Lys Glu Ser Gly Thr Glu
      1155              1160              1165
His His Arg Gly Pro Ser Thr Ser Arg Ser Ser Pro Asn Lys Arg Gly
      1170              1175              1180
Pro Pro Thr Tyr Asn Glu His Ile Thr Lys Arg Val Ala Ser Ser Pro
1185              1190              1195              1200
Ala Pro Pro Glu Gly Pro Ser His Pro Arg Glu Pro Ser Thr Pro His
      1205              1210              1215
Arg Tyr Arg Glu Gly Arg Thr Glu Leu Arg Arg Asp Lys Ser Pro Gly
      1220              1225              1230
Arg Pro Leu Glu Arg Glu Lys Ser Pro Gly Arg Met Leu Ser Thr Arg
      1235              1240              1245
Arg Glu Arg Ser Pro Gly Arg Leu Phe Glu Asp Ser Ser Arg Gly Arg
      1250              1255              1260
Leu Pro Ala Gly Ala Val Arg Thr Pro Leu Ser Gln Val Asn Lys Val
1265              1270              1275              1280
Trp Asp Gln Ser Ser Val
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<210> 6247

<211> 497

<212> DNA

<213> Homo sapiens

<400> 6247

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120
aaggctgcat ggggggtcctt gcccgggagg cgccccacct agagaaacag ccggcagccg
180
gccgcgagcg cgttctcccc ggagagaaat attattcatc tgtgccagag gaaggagggg
240
caacccatgt ctatcggtat cacagaggcg agtcgaagct gcacatgtgc ttggacatag
300
ggaatggtca gagaaaagac agaaaaaaga catcccttgg tcctggaggc agctatcaaa
360

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tatcagagca tgctccagag gcatcccagc ctgtgagtac ggaactgctt acgcactggg
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<210> 6248
 <211> 142
 <212> PRT
 <213> Homo sapiens

<400> 6248
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 Ala Ser Gln Arg Leu His Gly Gly Pro Cys Pro Gly Gly Ala Pro Pro
 35 40 45
 Arg Glu Thr Ala Gly Ser Arg Pro Ala Ala Arg Ser Pro Gly Arg Glu
 50 55 60
 Ile Leu Phe Ile Cys Ala Arg Gly Arg Arg Gly Asn Pro Cys Leu Ser
 65 70 75 80
 Leu Ser Gln Arg Arg Val Glu Ala Ala His Val Leu Gly His Arg Glu
 85 90 95
 Trp Ser Glu Lys Arg Gln Lys Lys Asp Ile Pro Trp Ser Trp Arg Gln
 100 105 110
 Leu Ser Asn Ile Arg Ala Cys Ser Arg Gly Ile Pro Ala Cys Glu Tyr
 115 120 125
 Gly Thr Ala Tyr Ala Leu Gly Phe Thr Thr Val Ala Thr Pro
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<210> 6249
 <211> 1217
 <212> DNA
 <213> Homo sapiens

<400> 6249
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 120
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 180
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 240
 attggccaag cagctgcctt agcttttgca agagaaggtg ccaaagtcac agccacagac
 300
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 360
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 420
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 720
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 1020
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 1080
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 1217

<210> 6250

<211> 245

<212> PRT

<213> Homo sapiens

<400> 6250

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 20 25 30
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 35 40 45
 Tyr Pro Gly Ile Gln Thr Arg Val Leu Asp Val Thr Lys Lys Lys Gln
 50 55 60
 Ile Asp Gln Phe Ala Asn Glu Val Glu Arg Leu Asp Val Leu Phe Asn
 65 70 75 80
 Val Ala Gly Phe Val His His Gly Thr Val Leu Asp Cys Glu Glu Lys
 85 90 95
 Asp Trp Asp Phe Ser Met Asn Leu Asn Val Arg Ser Met Tyr Leu Met
 100 105 110
 Ile Lys Ala Phe Leu Pro Lys Met Leu Ala Gln Lys Ser Gly Asn Ile
 115 120 125
 Ile Asn Met Ser Ser Val Ala Ser Ser Val Lys Gly Val Val Asn Arg
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<400> 6251
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240
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420
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600
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720
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840
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900
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960
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1020
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1080

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 aggggtctacc gggagagtca ccacatctat tatgaggcaa gggcactggg atatgttccc
 1200
 accatcccct aaacacaaga gtaggctagg ggagcgtgca ggcagcccc gctcacggcc
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 1320
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<210> 6252

<211> 100

<212> PRT

<213> Homo sapiens

<400> 6252

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Ala	Lys	Ser	Ser	Lys	Gly	Lys	Gly	Arg	Gly	His	Ser	Gly	Glu	Asn	Ser
			20				25					30			
Ile	Ser	Gly	Lys	Thr	Gly	Ile	His	Phe	Lys	Ile	Ser	Ala	Gln	Lys	Gly
		35				40					45				
Ser	Arg	Ala	Val	Leu	Lys	Pro	Gly	Arg	Gln	Gly	Pro	Pro	Ile	Pro	Thr
	50				55				60						
Ile	Leu	Leu	Ser	Pro	Ser	Pro	Pro	Trp	Arg	Thr	Leu	Ala	Arg	Val	Tyr
65				70				75					80		
Arg	Glu	Ser	His	His	Ile	Tyr	Tyr	Glu	Ala	Arg	Ala	Leu	Gly	Tyr	Val
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Pro	Thr	Ile	Pro												
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<210> 6253

<211> 1953

<212> DNA

<213> Homo sapiens

<400> 6253

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 240

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600
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1080
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1260
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1320
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1920

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<210> 6254

<211> 216

<212> PRT

<213> Homo sapiens

<400> 6254

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			20					25					30		
Glu	Ala	Thr	Leu	Gly	Ser	Gly	Asn	Leu	Arg	Gln	Ala	Val	Met	Leu	Pro
		35					40					45			
Glu	Gly	Glu	Asp	Leu	Asn	Glu	Trp	Ile	Ala	Val	Asn	Thr	Val	Asp	Phe
	50					55				60					
Phe	Asn	Gln	Ile	Asn	Met	Leu	Tyr	Gly	Thr	Ile	Thr	Glu	Phe	Cys	Thr
65					70					75				80	
Glu	Ala	Ser	Cys	Pro	Val	Met	Ser	Ala	Gly	Pro	Arg	Tyr	Glu	Tyr	His
			85					90					95		
Trp	Ala	Asp	Gly	Thr	Asn	Ile	Lys	Lys	Pro	Ile	Lys	Cys	Ser	Ala	Pro
		100						105					110		
Lys	Tyr	Ile	Asp	Tyr	Leu	Met	Thr	Trp	Val	Gln	Asp	Gln	Leu	Asp	Asp
	115						120				125				
Glu	Thr	Leu	Phe	Pro	Ser	Lys	Ile	Gly	Val	Pro	Phe	Pro	Lys	Asn	Phe
	130					135				140					
Met	Ser	Val	Ala	Lys	Thr	Ile	Leu	Lys	Arg	Leu	Phe	Arg	Val	Tyr	Ala
145					150					155				160	
His	Ile	Tyr	His	Gln	His	Phe	Asp	Ser	Val	Met	Gln	Leu	Gln	Glu	Glu
			165					170					175		
Ala	His	Leu	Asn	Thr	Ser	Phe	Lys	His	Phe	Ile	Phe	Phe	Val	Gln	Glu
		180					185					190			
Phe	Asn	Leu	Ile	Asp	Arg	Arg	Glu	Leu	Ala	Pro	Leu	Gln	Glu	Leu	Ile
	195						200				205				
Glu	Lys	Leu	Gly	Ser	Lys	Asp	Arg								
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<210> 6255

<211> 622

<212> DNA

<213> Homo sapiens

<400> 6255

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180
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240

cccatctaca tctcccgggt catcccaggg ggtgtggctg accgccatgg aggcctcaag
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 360
 gcgggtggagc tgctgaaggc ggcccagggc tcgggtgaagc tggttgtccg ttacacaccg
 420
 cgagtgtctg aggagatgga ggcccgggtc gagaagatgc gctctgcccc cgggcgccaa
 480
 cagcatcaga gctactcgtc cttggagtct cgaggttgaa accacagatc tggacgttca
 540
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<210> 6256

<211> 150

<212> PRT

<213> Homo sapiens

<400> 6256.

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					70					75				80	
Asp	Gln	Leu	Leu	Ser	Val	Asn	Gly	Val	Ser	Val	Glu	Gly	Glu	Gln	His
					85					90				95	
Glu	Lys	Ala	Val	Glu	Leu	Leu	Lys	Ala	Ala	Gln	Gly	Ser	Val	Lys	Leu
					100					105				110	
Val	Val	Arg	Tyr	Thr	Pro	Arg	Val	Leu	Glu	Glu	Met	Glu	Ala	Arg	Phe
			115					120					125		
Glu	Lys	Met	Arg	Ser	Ala	Arg	Arg	Arg	Gln	Gln	His	Gln	Ser	Tyr	Ser
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<210> 6257

<211> 2216

<212> DNA

<213> Homo sapiens

<400> 6257

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<211> 340

<212> PRT

<213> Homo sapiens

<400> 6258

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Val	Trp	Thr	Asp	Ser	Asp	Trp	Met	Val	Cys	Gly	Gly	Gly	Pro	Ala	Leu
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Thr	Leu	Trp	His	Leu	Arg	Ser	Ser	Thr	Pro	Thr	Thr	Ile	Phe	Pro	Ile
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                290                295                300
Asn Gln Gln Pro Ala Ala Pro Glu Cys Lys Val Leu Thr Ala Ala Gly
305                310                315                320
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Ser Leu Ser Phe
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<210> 6259
 <211> 384
 <212> DNA
 <213> Homo sapiens

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180
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 <211> 128
 <212> PRT
 <213> Homo sapiens

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20          25          30
Gln Lys Asn Glu Lys Ile Lys Tyr Ser Arg Phe Ala Ala Thr Asn Thr
35          40          45
Arg Val Lys Ala Lys Gln Lys Pro Leu Ile Ser Asn Ser His Thr Asp
50          55          60
His Leu Met Gly Cys Thr Lys Ser Ala Glu Pro Gly Thr Glu Thr Ser
65          70          75          80
Gln Val Asn Ser Phe Ser Asp Leu Lys Ala Ser Thr Leu Val His Lys
85          90          95
Pro Gln Ser Asp Phe Thr Asn Asp Ala Leu Ser Pro Lys Phe Asn Leu
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<211> 3619
<212> DNA
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<211> 431

<212> PRT

<213> Homo sapiens

<400> 6262

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			20					25					30		
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Val	Ser	Gly	Ser	Arg	Asp	Gly	Ser	Met	Gly	Leu	Trp	Glu	Val	Thr	Asp
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<212> DNA

<213> Homo sapiens

<400> 6263

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2160

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<210> 6264

<211> 654

<212> PRT

<213> Homo sapiens

<400> 6264

Met	Ala	Ser	Asn	Met	Asp	Arg	Glu	Met	Ile	Leu	Ala	Asp	Phe	Gln	Ala
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Cys	Thr	Gly	Ile	Glu	Asn	Ile	Asp	Glu	Ala	Ile	Thr	Leu	Leu	Glu	Gln
		20						25					30		
Asn	Asn	Trp	Asp	Leu	Val	Ala	Ala	Ile	Asn	Gly	Val	Ile	Pro	Gln	Glu
		35					40					45			
Asn	Gly	Ile	Leu	Gln	Ser	Glu	Tyr	Gly	Gly	Glu	Thr	Ile	Pro	Gly	Pro
	50					55					60				
Ala	Phe	Asn	Pro	Ala	Ser	His	Pro	Ala	Ser	Ala	Pro	Thr	Ser	Ser	Ser
65					70					75				80	
Ser	Ser	Ala	Phe	Arg	Pro	Val	Met	Pro	Ser	Arg	Gln	Ile	Val	Glu	Arg
				85					90					95	
Gln	Pro	Arg	Met	Leu	Asp	Phe	Arg	Val	Glu	Tyr	Arg	Asp	Arg	Asn	Val
		100						105					110		
Asp	Val	Val	Leu	Glu	Asp	Thr	Cys	Thr	Val	Gly	Glu	Ile	Lys	Gln	Ile
		115					120					125			
Leu	Glu	Asn	Glu	Leu	Gln	Ile	Pro	Val	Ser	Lys	Met	Leu	Leu	Lys	Gly
	130					135					140				
Trp	Lys	Thr	Gly	Asp	Val	Glu	Asp	Ser	Thr	Val	Leu	Lys	Ser	Leu	His
145					150					155				160	
Leu	Pro	Lys	Asn	Asn	Ser	Leu	Tyr	Val	Leu	Thr	Pro	Asp	Leu	Pro	Pro
				165					170					175	
Pro	Ser	Ser	Ser	Ser	His	Ala	Gly	Ala	Leu	Gln	Glu	Ser	Leu	Asn	Gln
			180					185					190		
Asn	Phe	Met	Leu	Ile	Ile	Thr	His	Arg	Glu	Val	Gln	Arg	Glu	Tyr	Asn
	195						200					205			
Leu	Asn	Phe	Ser	Gly	Ser	Ser	Thr	Ile	Gln	Glu	Val	Lys	Arg	Asn	Val
	210					215					220				
Tyr	Asp	Leu	Thr	Ser	Ile	Pro	Val	Arg	His	Gln	Leu	Trp	Glu	Gly	Trp
225					230					235				240	
Pro	Thr	Ser	Ala	Thr	Asp	Asp	Ser	Met	Cys	Leu	Ala	Glu	Ser	Gly	Leu
				245					250					255	
Ser	Tyr	Pro	Cys	His	Arg	Leu	Thr	Val	Gly	Arg	Arg	Ser	Ser	Pro	Ala
			260					265					270		
Gln	Thr	Arg	Glu	Gln	Ser	Glu	Glu	Gln	Ile	Thr	Asp	Val	His	Met	Val

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      275              280              285
Ser Asp Ser Asp Gly Asp Asp Phe Glu Asp Ala Thr Glu Phe Gly Val
  290              295              300
Asp Asp Gly Glu Val Phe Gly Met Ala Ser Ser Ala Leu Arg Lys Ser
  305              310              315              320
Pro Met Ile Cys Phe Leu Val Pro Glu Asn Ala Glu Asn Glu Gly Asp
      325              330              335
Ala Leu Leu Gln Phe Thr Ala Glu Phe Ser Ser Arg Tyr Gly Asp Cys
      340              345              350
His Pro Val Phe Phe Ile Gly Ser Leu Glu Ala Ala Phe Gln Glu Ala
      355              360              365
Phe Tyr Val Lys Ala Arg Asp Arg Lys Leu Leu Ala Ile Tyr Leu His
      370              375              380
His Asp Glu Ser Val Leu Thr Asn Val Phe Cys Ser Gln Met Leu Cys
  385              390              395              400
Ala Glu Ser Ile Val Ser Tyr Leu Ser Gln Asn Phe Ile Thr Trp Ala
      405              410              415
Trp Asp Leu Thr Lys Asp Ser Asn Arg Ala Arg Phe Leu Thr Met Cys
      420              425              430
Asn Arg His Phe Gly Ser Val Val Ala Gln Thr Ile Arg Thr Gln Lys
      435              440              445
Thr Asp Gln Phe Pro Leu Phe Leu Ile Ile Met Gly Lys Arg Ser Ser
      450              455              460
Asn Glu Val Leu Asn Val Ile Gln Gly Asn Thr Thr Val Asp Glu Leu
  465              470              475              480
Met Met Arg Leu Met Ala Ala Met Glu Ile Phe Thr Ala Gln Gln Gln
      485              490              495
Glu Asp Ile Lys Asp Glu Asp Glu Arg Glu Ala Arg Glu Asn Val Lys
      500              505              510
Arg Glu Gln Asp Glu Ala Tyr Arg Leu Ser Leu Glu Ala Asp Arg Ala
      515              520              525
Lys Arg Glu Ala His Glu Arg Glu Met Ala Glu Gln Phe Arg Leu Glu
      530              535              540
Gln Ile Arg Lys Glu Gln Glu Glu Arg Glu Ala Ile Arg Leu Ser
  545              550              555              560
Leu Glu Gln Ala Leu Pro Pro Glu Pro Lys Glu Glu Asn Ala Glu Pro
      565              570              575
Val Ser Lys Leu Arg Ile Arg Thr Pro Ser Gly Glu Phe Leu Glu Arg
      580              585              590
Arg Phe Leu Ala Ser Asn Lys Leu Gln Ile Val Phe Asp Phe Val Ala
      595              600              605
Ser Lys Gly Phe Pro Trp Asp Glu Tyr Lys Leu Leu Ser Thr Phe Pro
      610              615              620
Arg Arg Asp Val Thr Gln Leu Asp Pro Asn Lys Ser Leu Leu Glu Val
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Lys Leu Phe Pro Gln Glu Thr Leu Phe Leu Glu Ala Lys Glu
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<210> 6265

<211> 1344

<212> DNA

<213> Homo sapiens

<400> 6265

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120
tctgtggagg aagagatgca aagtacagtt cgagagcaca gagatggagg tcatgcaggt
180
ggaatcttca acagatacaa tattctcaag attcagaagg tttgtaacaa gaaactatgg
240
gaaagataca ctcaccggag aaaagaagtt tctgaagaaa accacaacca tgccaatgaa
300
cgaatgctat ttcattgggtc tccttttgtg aatgcaatta tccacaaagg ctttgatgaa
360
aggcatcggt acatagggtg tatgtttgga gctggcattt attttgctga aaactcttcc
420
aaaagcaatc aatatgtata tggaattgga ggaggtactg ggtgtccagt tcacaaagac
480
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540
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660
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780
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1080
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1140
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1200
gtttacaaaa ttttttcata tgtattgttc atctatactt catcttacat cgtcatgatt
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<210> 6266

<211> 240

<212> PRT

<213> Homo sapiens

<400> 6266

Xaa Ala Leu Pro Ala Ser His Arg Pro Gly Gln Gln Gly Leu Asn Pro

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Tyr	Leu	Thr	Leu	Asn	Thr	Ser	Gly	Ser	Gly	Thr	Ile	Leu	Ile	Asp	Leu
		20					25					30			
Ser	Pro	Asp	Asp	Lys	Glu	Phe	Gln	Ser	Val	Glu	Glu	Glu	Met	Gln	Ser
		35					40					45			
Thr	Val	Arg	Glu	His	Arg	Asp	Gly	Gly	His	Ala	Gly	Gly	Ile	Phe	Asn
		50				55					60				
Arg	Tyr	Asn	Ile	Leu	Lys	Ile	Gln	Lys	Val	Cys	Asn	Lys	Lys	Leu	Trp
65					70					75				80	
Glu	Arg	Tyr	Thr	His	Arg	Arg	Lys	Glu	Val	Ser	Glu	Glu	Asn	His	Asn
				85					90					95	
His	Ala	Asn	Glu	Arg	Met	Leu	Phe	His	Gly	Ser	Pro	Phe	Val	Asn	Ala
		100						105					110		
Ile	Ile	His	Lys	Gly	Phe	Asp	Glu	Arg	His	Ala	Tyr	Ile	Gly	Gly	Met
		115					120						125		
Phe	Gly	Ala	Gly	Ile	Tyr	Phe	Ala	Glu	Asn	Ser	Ser	Lys	Ser	Asn	Gln
		130				135					140				
Tyr	Val	Tyr	Gly	Ile	Gly	Gly	Gly	Thr	Gly	Cys	Pro	Val	His	Lys	Asp
145					150					155				160	
Arg	Ser	Cys	Tyr	Ile	Cys	His	Arg	Gln	Leu	Leu	Phe	Cys	Arg	Val	Thr
				165					170					175	
Leu	Gly	Lys	Ser	Phe	Leu	Gln	Phe	Ser	Ala	Met	Lys	Met	Ala	His	Ser
			180					185					190		
Pro	Pro	Gly	His	His	Ser	Val	Thr	Gly	Arg	Pro	Ser	Val	Asn	Gly	Leu
		195					200						205		
Ala	Leu	Ala	Glu	Tyr	Val	Ile	Tyr	Arg	Gly	Glu	Gln	Ala	Tyr	Pro	Glu
		210				215					220				
Tyr	Leu	Ile	Thr	Tyr	Gln	Ile	Met	Arg	Pro	Glu	Gly	Met	Val	Asp	Gly
225					230					235				240	

<210> 6267

<211> 328

<212> DNA

<213> Homo sapiens

<400> 6267

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120

gatgagcctt tctgcagtt ccgaaggaac gtgttcttcc caaagcggcg ggagctccag
180

atccatgacg aggaggtcct gcggctgctc tatgaggagg ccaagggcaa cgtgctggct
240

gcacgggtacc cgtgcgacgt ggaggactgc gaggctctgg gcgccctggt gtgccgcgtg
300

cagcttgggc cctaccagcc cggccggc

328

<210> 6268

<211> 83

<212> PRT

<213> Homo sapiens

<400> 6268

Ala Glu Trp Gly Cys Pro Ala Val Thr Gln Pro Leu Ser Pro Asp Glu
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 20 25 30
 Leu Gln Ile His Asp Glu Glu Val Leu Arg Leu Leu Tyr Glu Glu Ala
 35 40 45
 Lys Gly Asn Val Leu Ala Ala Arg Tyr Pro Cys Asp Val Glu Asp Cys
 50 55 60
 Glu Ala Leu Gly Ala Leu Val Cys Arg Val Gln Leu Gly Pro Tyr Gln
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<210> 6269

<211> 923

<212> DNA

<213> Homo sapiens

<400> 6269

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 aacgtgatgg ttctccagga cgaaaatttt gtcagtaaag aagagttcca ggcagtggag
 180
 aagaagctgg tggaagagaa agctgcccac gccaaaacca aggtcctcct ggccaaggaa
 240
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 300
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 360
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 420
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 480
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 aagcctcagg gacacgtcag gcccgagcc accagcatcc cagggaaaaa taaaatggcc
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<210> 6270

<211> 307
 <212> PRT
 <213> Homo sapiens

<400> 6270

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          20           25           30
Glu Glu Leu Ile His Gln Leu Arg Asn Val Met Val Leu Gln Asp Glu
          35           40           45
Asn Phe Val Ser Lys Glu Glu Phe Gln Ala Val Glu Lys Lys Leu Val
          50           55           60
Glu Glu Lys Ala Ala His Ala Lys Thr Lys Val Leu Leu Ala Lys Glu
65          70          75          80
Glu Glu Lys Leu Gln Phe Ala Leu Gly Glu Val Glu Val Leu Ser Lys
          85          90          95
Gln Leu Glu Lys Glu Lys Leu Ala Phe Glu Lys Ala Leu Ser Ser Val
          100         105         110
Lys Ser Lys Val Leu Gln Glu Ser Ser Lys Lys Asp Gln Leu Ile Thr
          115         120         125
Lys Cys Asn Glu Ile Glu Ser His Ile Ile Lys Gln Glu Asp Ile Leu
          130         135         140
Asn Gly Lys Glu Asn Glu Ile Lys Glu Leu Gln Gln Val Ile Ser Gln
145         150         155         160
Gln Lys Gln Ile Phe Ser Pro Pro Pro Ala Gly Ser Val Ala Gly Ile
          165         170         175
Thr Cys Leu Thr Ser Gly Ser Arg Ser Ser Arg Lys Ala Thr Trp Pro
          180         185         190
Arg Cys Trp Thr Arg Ser Ile Arg Lys Pro Gln Gly His Val Arg Pro
          195         200         205
Ala Ala Thr Ser Ile Pro Gly Lys Asn Lys Met Ala Ala Ala Phe Leu
          210         215         220
Phe Ser Gly Cys Asn Pro Gln Pro Leu Pro Ser Leu Leu Trp Glu Ser
225         230         235         240
Pro Ala Ser Ser Pro Cys Tyr Phe Pro Pro Ser Trp Ile Val Val Gly
          245         250         255
Val His Lys Val Gly Ala Cys Ser Leu Gly Glu Glu Leu Gly Leu Cys
          260         265         270
Cys Leu Val Gly Thr Thr Ala Ser Phe Gly Tyr Leu Ile Pro Ser Tyr
          275         280         285
Ile Asn Ser Pro Gly Tyr Pro Val Ile Phe His Pro Thr Pro Ser Val
          290         295         300
Leu Val Asn
305

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<210> 6271
 <211> 1437
 <212> DNA
 <213> Homo sapiens

<400> 6271

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180
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300
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1320
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1437

<210> 6272

<211> 296

<212> PRT

<213> Homo sapiens

<400> 6272

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Leu Glu Val Ile Lys Thr Arg Leu Gln Ser Ser Arg Leu Ala Leu Arg
35           40           45
Thr Val Tyr Tyr Pro Gln Val His Leu Gly Thr Ile Ser Gly Ala Gly
50           55           60
Met Val Arg Pro Thr Ser Val Thr Pro Gly Leu Phe Gln Val Leu Lys
65           70           75           80
Ala Val Tyr Phe Ala Cys Tyr Ser Lys Ala Lys Glu Gln Phe Asn Gly
85           90           95
Ile Phe Val Pro Asn Ser Asn Ile Val His Leu Phe Ser Ala Gly Ser
100          105          110
Ala Ala Phe Ile Thr Asn Ser Leu Met Asn Pro Ile Trp Met Val Lys
115          120          125
Thr Arg Met Gln Leu Glu Gln Lys Val Arg Gly Ser Lys Gln Met Asn
130          135          140
Thr Leu Gln Cys Ala Arg Tyr Val Tyr Gln Thr Glu Gly Ile Arg Gly
145          150          155          160
Phe Tyr Arg Gly Leu Thr Ala Ser Tyr Ala Gly Ile Ser Glu Thr Ile
165          170          175
Ile Cys Phe Ala Ile Tyr Glu Ser Leu Lys Lys Tyr Leu Lys Glu Ala
180          185          190
Pro Leu Ala Ser Ser Ala Asn Gly Thr Glu Lys Asn Ser Thr Ser Phe
195          200          205
Phe Gly Leu Met Ala Ala Ala Leu Ser Lys Gly Cys Ala Ser Cys
210          215          220
Ile Ala Tyr Pro His Glu Val Ile Arg Thr Arg Leu Arg Glu Glu Gly
225          230          235          240
Thr Lys Tyr Lys Ser Phe Val Gln Thr Ala Arg Leu Val Phe Arg Glu
245          250          255
Glu Gly Tyr Leu Ala Phe Tyr Arg Gly Leu Phe Ala Gln Leu Ile Arg
260          265          270
Gln Ile Pro Asn Thr Ala Ile Val Leu Ser Thr Tyr Glu Leu Ile Val
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Tyr Leu Leu Glu Asp Arg Thr Gln
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<210> 6273

<211> 2355

<212> DNA

<213> Homo sapiens

<400> 6273

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180
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240
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300

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<212> PRT

<213> Homo sapiens

<400> 6276

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Asp	Asp	Leu	Ser	Asn	Ala	Ala	Arg	Glu	Leu	Arg	Val	Leu	Ile	Asp	Asp
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Ser	Gln	Ser	Ile	Ile	Phe	Ile	Asn	Leu	Asp	Ser	His	Arg	Asn	Val	Met
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<210> 6278
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 Gly Ile Leu Glu Gln Gly Pro Ser Pro Gly Asp Gly Ser Pro Pro Lys
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 Pro Gly Asn Pro Pro Pro Gly His Pro Gly Gly Gln Ser Ser Ser Gly
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Glu	Ala	Gln	Ala	Tyr	Thr	Ala	Tyr	Leu	Ser	Gly	Met	Leu	Arg	Phe	Glu	
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<211> 741

<212> DNA

<213> Homo sapiens

<400> 6281

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Glu	Lys	Lys	Gln	Met	Val	Ala	Asn	Val	Glu	Lys	Gln	Leu	Glu	Glu	Ala
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Lys	Glu	Leu	Leu	Glu	Gln	Met	Asp	Leu	Glu	Val	Arg	Glu	Ile	Pro	Pro
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Gln	Ser	Arg	Gly	Met	Tyr	Ser	Asn	Arg	Met	Arg	Ser	Tyr	Lys	Gln	Glu
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Met	Gly	Lys	Leu	Glu	Thr	Asp	Phe	Lys	Arg	Ser	Arg	Ile	Ala	Tyr	Ser
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<213> Homo sapiens

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2400
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2580
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2640

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<210> 6292

<211> 497

<212> PRT

<213> Homo sapiens

<400> 6292

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Pro	Ala	His	Phe	Ser	Asp	Ser	Ala	Gln	Thr	Glu	Ala	Cys	Tyr	His	Met
		20					25					30			
Leu	Ser	Arg	Pro	Gln	Pro	Pro	Pro	Asp	Pro	Leu	Leu	Leu	Gln	Arg	Leu
	35					40					45				
Pro	Arg	Pro	Ser	Ser	Leu	Ser	Asp	Lys	Thr	Gln	Leu	His	Ser	Arg	Trp
	50					55				60					
Leu	Asp	Ser	Ser	Arg	Cys	Leu	Met	Gln	Gln	Gly	Ile	Lys	Ala	Gly	Asp
65				70				75						80	
Ala	Leu	Trp	Leu	Arg	Phe	Lys	Tyr	Tyr	Ser	Phe	Phe	Asp	Leu	Asp	Pro
			85					90					95		
Lys	Thr	Asp	Pro	Val	Arg	Leu	Thr	Gln	Leu	Tyr	Glu	Gln	Ala	Arg	Trp
	100						105					110			
Asp	Leu	Leu	Leu	Glu	Glu	Ile	Asp	Cys	Thr	Glu	Glu	Glu	Met	Met	Val
	115					120					125				
Phe	Ala	Ala	Leu	Gln	Tyr	His	Ile	Asn	Lys	Leu	Ser	Gln	Ser	Gly	Glu
	130					135				140					
Val	Gly	Glu	Pro	Ala	Gly	Thr	Asp	Pro	Gly	Leu	Asp	Asp	Leu	Asp	Val
145					150				155					160	
Ala	Leu	Ser	Asn	Leu	Glu	Val	Lys	Leu	Glu	Gly	Ser	Ala	Pro	Thr	Asp
			165					170						175	
Val	Leu	Asp	Ser	Leu	Thr	Thr	Ile	Pro	Glu	Leu	Lys	Asp	Tyr	Leu	Arg
	180							185				190			
Ile	Phe	Arg	Pro	Arg	Lys	Leu	Thr	Leu	Lys	Gly	Tyr	Arg	Gln	His	Trp
	195					200						205			
Val	Val	Phe	Lys	Glu	Thr	Thr	Leu	Ser	Tyr	Tyr	Lys	Ser	Gln	Asp	Glu
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225				230					235					240	
Val	Pro	Asp	Val	Asn	Val	Ser	Gly	Gln	Lys	Phe	Cys	Ile	Lys	Leu	Leu
			245					250						255	
Val	Pro	Ser	Pro	Glu	Gly	Met	Ser	Glu	Ile	Tyr	Leu	Arg	Cys	Gln	Asp
	260						265					270			
Glu	Gln	Gln	Tyr	Ala	Arg	Trp	Met	Ala	Gly	Cys	Arg	Leu	Ala	Ser	Lys
	275					280						285			
Gly	Arg	Thr	Met	Ala	Asp	Ser	Ser	Tyr	Thr	Ser	Glu	Val	Gln	Ala	Ile
	290					295					300				
Leu	Ala	Phe	Leu	Ser	Leu	Gln	His	Gly	Gln	Trp	Gly	Pro	Arg	Gln	Pro
305					310				315					320	
Pro	Pro	Arg	Pro	Asp	Ala	Ser	Ala	Glu	Gly	Leu	Asn	Pro	Tyr	Gly	Leu
			325					330						335	
Val	Ala	Pro	Arg	Phe	Gln	Arg	Lys	Phe	Lys	Ala	Lys	Gln	Leu	Thr	Pro

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          340          345          350
Arg Ile Leu Glu Ala His Gln Asn Val Ala Gln Leu Ser Leu Ala Glu
          355          360          365
Ala Gln Leu Arg Phe Ile Gln Ala Trp Gln Ser Leu Pro Asp Phe Gly
          370          375          380
Ile Ser Tyr Val Met Val Arg Phe Lys Gly Ser Arg Lys Asp Glu Ile
385          390          395          400
Leu Gly Ile Ala Asn Asn Arg Leu Ile Arg Ile Asp Leu Ala Val Gly
          405          410          415
Asp Val Val Lys Thr Trp Arg Phe Ser Asn Met Arg Gln Trp Asn Val
          420          425          430
Asn Trp Asp Ile Arg Gln Val Ala Ile Glu Phe Asp Glu His Ile Asn
          435          440          445
Val Ala Phe Ser Cys Val Ser Ala Ser Cys Arg Ile Val His Glu Tyr
          450          455          460
Ile Gly Gly Tyr Ile Phe Leu Ser Thr Arg Glu Arg Ala Arg Gly Glu
465          470          475          480
Glu Leu Asp Glu Asp Leu Phe Leu Gln Leu Thr Gly Gly His Glu Ala
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<210> 6293

<211> 750

<212> DNA

<213> Homo sapiens

<400> 6293

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300
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360
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420
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480
cgttactaca aggagacctc tggcctgatg ctggacgttg gtccctacat gaaggcgctt
540
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600
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660
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750

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<210> 6294
 <211> 250
 <212> PRT
 <213> Homo sapiens

<400> 6294
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 Gly Gly Thr Ala Ile Ala Gly Ser Val Glu Ala Val Ala Arg Leu Lys
 35 40 45
 Arg Ser Arg Leu Lys Val Arg Phe Cys Thr Asn Glu Ser Gln Lys Ser
 50 55 60
 Arg Ala Glu Leu Val Gly Gln Leu Gln Arg Leu Gly Phe Asp Ile Ser
 65 70 75 80
 Glu Gln Glu Val Thr Ala Pro Ala Pro Ala Ala Cys Gln Ile Leu Lys
 85 90 95
 Glu Arg Gly Leu Arg Pro Tyr Leu Leu Ile His Asp Gly Val Arg Ser
 100 105 110
 Glu Phe Asp Gln Ile Asp Thr Ser Asn Pro Asn Cys Val Val Ile Ala
 115 120 125
 Asp Ala Gly Glu Ser Phe Ser Tyr Gln Asn Met Asn Asn Ala Phe Gln
 130 135 140
 Val Leu Met Glu Leu Glu Lys Pro Val Leu Ile Ser Leu Gly Lys Gly
 145 150 155 160
 Arg Tyr Tyr Lys Glu Thr Ser Gly Leu Met Leu Asp Val Gly Pro Tyr
 165 170 175
 Met Lys Ala Leu Glu Tyr Ala Cys Gly Ile Lys Ala Glu Val Val Gly
 180 185 190
 Lys Pro Ser Pro Glu Phe Phe Lys Ser Ala Leu Gln Ala Ile Gly Val
 195 200 205
 Glu Ala His Gln Ala Val Met Ile Gly Asp Asp Ile Val Gly Asp Val
 210 215 220
 Gly Gly Ala Gln Arg Cys Gly Met Arg Ala Leu Gln Val Arg Thr Gly
 225 230 235 240
 Lys Phe Arg Pro Ser Asp Glu His His Pro
 245 250

<210> 6295
 <211> 2091
 <212> DNA
 <213> Homo sapiens

<400> 6295
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 120
 cgccgccggc cagccctccg gctgtggggc cgggtagttg aacgggtcga ggccggggga
 180
 ggcgtggggc cgtttcaggc ctgcggctgt cggctggtgc ttggcggcag ggacgatgtg
 240

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300
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360
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420
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480
gatgtagctg agctgattcg ggccagagcc tgccagaggg tgggtggtcat ggtggggggc
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780
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1320
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1440
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1560
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1620
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1680
catgagctgc agtgactggt agggctgtgt ttacagtcag ggccaccccg tcacatatac
1740
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1860

ccgagtcctgc ttctctgtgcc tagttgaacg gcaagctcgg catctgttgg ttacaagatc
 1920
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 1980
 tgggtgccga cttctagcat gttggtctcc tttagtgggg ctatttttaa tgagagaaaa
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 2091

<210> 6296

<211> 399

<212> PRT

<213> Homo sapiens

<400> 6296

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Ala	Cys	Gly	Cys	Arg	Leu	Val	Leu	Gly	Gly	Arg	Asp	Asp	Val	Ser	Ala	35	40	45	
Gly	Leu	Arg	Gly	Ser	His	Gly	Ala	Arg	Gly	Glu	Pro	Leu	Asp	Pro	Ala	50	55	60	
Arg	Pro	Leu	Gln	Arg	Pro	Pro	Arg	Pro	Glu	Val	Pro	Arg	Ala	Phe	Arg	65	70	75	80
Arg	Gln	Pro	Arg	Ala	Ala	Ala	Pro	Ser	Phe	Phe	Phe	Ser	Ser	Ile	Lys	85	90	95	
Gly	Gly	Arg	Arg	Ser	Ile	Ser	Phe	Ser	Val	Gly	Ala	Ser	Ser	Val	Val	100	105	110	
Gly	Ser	Gly	Gly	Ser	Ser	Asp	Lys	Gly	Lys	Leu	Ser	Leu	Gln	Asp	Val	115	120	125	
Ala	Glu	Leu	Ile	Arg	Ala	Arg	Ala	Cys	Gln	Arg	Val	Val	Val	Met	Val	130	135	140	
Gly	Ala	Gly	Ile	Ser	Thr	Pro	Ser	Gly	Ile	Pro	Asp	Phe	Arg	Ser	Pro	145	150	155	160
Gly	Ser	Gly	Leu	Tyr	Ser	Asn	Leu	Gln	Gln	Tyr	Asp	Leu	Pro	Tyr	Pro	165	170	175	
Glu	Ala	Ile	Phe	Glu	Leu	Pro	Phe	Phe	Phe	His	Asn	Pro	Lys	Pro	Phe	180	185	190	
Phe	Thr	Leu	Ala	Lys	Glu	Leu	Tyr	Pro	Gly	Asn	Tyr	Lys	Pro	Asn	Val	195	200	205	
Thr	His	Tyr	Phe	Leu	Arg	Leu	Leu	His	Asp	Lys	Gly	Leu	Leu	Leu	Arg	210	215	220	
Leu	Tyr	Thr	Gln	Asn	Ile	Asp	Gly	Leu	Glu	Arg	Val	Ser	Gly	Ile	Pro	225	230	235	240
Ala	Ser	Lys	Leu	Val	Glu	Ala	His	Gly	Thr	Phe	Ala	Ser	Ala	Thr	Cys	245	250	255	
Thr	Val	Cys	Gln	Arg	Pro	Phe	Pro	Gly	Glu	Asp	Ile	Arg	Ala	Asp	Val	260	265	270	
Met	Ala	Asp	Arg	Val	Pro	Arg	Cys	Pro	Val	Cys	Thr	Gly	Val	Val	Lys	275	280	285	
Pro	Asp	Ile	Val	Phe	Phe	Gly	Glu	Pro	Leu	Pro	Gln	Arg	Phe	Leu	Leu	290	295	300	
His	Val	Val	Asp	Phe	Pro	Met	Ala	Asp	Leu	Leu	Leu	Ile	Leu	Gly	Thr				

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305          310          315          320
Ser Leu Glu Val Glu Pro Phe Ala Ser Leu Thr Glu Ala Val Arg Ser
          325          330          335
Ser Val Pro Arg Leu Leu Ile Asn Arg Asp Leu Val Gly Pro Leu Ala
          340          345          350
Trp His Pro Arg Ser Arg Asp Val Ala Gln Leu Gly Asp Val Val His
          355          360          365
Gly Val Glu Ser Leu Val Glu Leu Leu Gly Trp Thr Glu Glu Met Arg
          370          375          380
Asp Leu Val Gln Arg Glu Thr Gly Lys Leu Asp Gly Pro Asp Lys
385          390          395

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<210> 6297
 <211> 472
 <212> DNA
 <213> Homo sapiens

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<400> 6297
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120
ttcggaagcc cgttcggcct ggaggagccg cagtgggtcc cggacaagga gtgtcggaga
180
tgtatgcagt gtgacgcaa gtttgacttt ctcaccagaa agcaccactg tcgccgtgcg
240
gggaagtgtc tctgcgacag gtgctgcagc cagaagggtc cgctgcggcg catgtgcttt
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360
tacgacaagc agctcaaagt gctcctgagc ggtaaggacg ggtgtcctgc acagtcctgc
420
gcgtccgcc agccggtcc tcgtgtctgt ggcgatgctg tgggctgtgc ac
472

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<210> 6298
 <211> 146
 <212> PRT
 <213> Homo sapiens

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<400> 6298
Met Ser Ser Glu Val Ser Ala Arg Arg Asp Ala Lys Lys Leu Val Arg
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Ser Pro Ser Gly Leu Arg Met Val Pro Glu His Arg Ala Phe Gly Ser
          20          25          30
Pro Phe Gly Leu Glu Glu Pro Gln Trp Val Pro Asp Lys Glu Cys Arg
          35          40          45
Arg Cys Met Gln Cys Asp Ala Lys Phe Asp Phe Leu Thr Arg Lys His
          50          55          60
His Cys Arg Arg Cys Gly Lys Cys Phe Cys Asp Arg Cys Cys Ser Gln
65          70          75          80
Lys Val Pro Leu Arg Arg Met Cys Phe Val Asp Pro Val Arg Gln Cys
          85          90          95
Ala Glu Cys Ala Leu Val Ser Leu Lys Glu Ala Glu Phe Tyr Asp Lys

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	100		105		110										
Gln	Leu	Lys	Val	Leu	Leu	Ser	Gly	Lys	Asp	Gly	Cys	Pro	Ala	Gln	Ser
	115		120		125										
Cys	Ala	Leu	Arg	Gln	Pro	Ala	Pro	Arg	Val	Cys	Gly	Asp	Ala	Val	Gly
	130		135		140										
Cys	Ala														
145															

<210> 6299

<211> 1466

<212> DNA

<213> Homo sapiens

<400> 6299

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120
ggcggccagc ccgcccattg gcccaggag agcctgggtc tgtaccactg gacccagtcc
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240
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420
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1080
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1140
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1200

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tcataaacac ttggacagcc ctccccgccc ttcgttctga gtaataatac cgtcagtgtg
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 aaaacattcc gtagtttaga agtagacgtt gcaaatgctg tgactcaagg ccacgggtct
 1320
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 1380
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<210> 6300

<211> 372

<212> PRT

<213> Homo sapiens

<400> 6300

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Leu	Gln	Leu	Val	Ala	His	Leu	Arg	Ala	Gly	Glu	Arg	Cys	Gly	Gln	Ala
			20					25					30		
Ser	Gly	Gly	Pro	Arg	Arg	Ser	Arg	Gly	Gly	Gln	Pro	Ala	His	Trp	Pro
		35					40					45			
Arg	Glu	Ser	Leu	Val	Leu	Tyr	His	Trp	Thr	Gln	Ser	Phe	Ser	Ser	Gln
	50					55					60				
Lys	Val	Arg	Leu	Val	Ile	Ala	Glu	Lys	Gly	Leu	Val	Cys	Glu	Glu	Arg
65					70					75					80
Asp	Val	Ser	Leu	Pro	Gln	Ser	Glu	His	Lys	Glu	Pro	Trp	Phe	Met	Arg
				85					90					95	
Leu	Asn	Leu	Gly	Glu	Glu	Val	Pro	Val	Ile	Ile	His	Arg	Asp	Asn	Ile
			100						105					110	
Ile	Ser	Asp	Tyr	Asp	Gln	Ile	Ile	Asp	Tyr	Val	Glu	Arg	Thr	Phe	Thr
		115					120					125			
Gly	Glu	His	Val	Val	Ala	Leu	Met	Pro	Glu	Val	Gly	Ser	Leu	Gln	His
	130					135					140				
Ala	Arg	Val	Leu	Gln	Tyr	Arg	Glu	Leu	Leu	Asp	Ala	Leu	Pro	Met	Asp
145					150					155					160
Ala	Tyr	Thr	His	Gly	Cys	Ile	Leu	His	Pro	Glu	Leu	Thr	Thr	Asp	Ser
				165					170					175	
Met	Ile	Pro	Lys	Tyr	Ala	Thr	Ala	Glu	Ile	Arg	Arg	His	Leu	Ala	Asn
			180					185					190		
Ala	Thr	Thr	Asp	Leu	Met	Lys	Leu	Asp	His	Glu	Glu	Glu	Pro	Gln	Leu
		195					200						205		
Ser	Glu	Pro	Tyr	Leu	Ser	Lys	Gln	Lys	Lys	Leu	Met	Ala	Lys	Ile	Leu
	210					215					220				
Glu	His	Asp	Asp	Val	Ser	Tyr	Leu	Lys	Lys	Ile	Leu	Gly	Glu	Leu	Ala
225					230					235					240
Met	Val	Leu	Asp	Gln	Ile	Glu	Ala	Glu	Leu	Glu	Lys	Arg	Lys	Leu	Glu
				245					250					255	
Asn	Glu	Gly	Gln	Lys	Cys	Glu	Leu	Trp	Leu	Cys	Gly	Cys	Ala	Phe	Thr
			260					265					270		
Leu	Ala	Asp	Val	Leu	Leu	Gly	Ala	Thr	Leu	His	Arg	Leu	Lys	Phe	Leu
		275					280					285			
Gly	Leu	Ser	Lys	Lys	Tyr	Trp	Glu	Asp	Gly	Ser	Arg	Pro	Asn	Leu	Gln

290		295		300
Ser Phe Phe Glu Arg Val Gln Arg Arg Phe Ala Phe Arg Lys Val Leu				
305		310		315
Gly Asp Ile His Thr Thr Leu Leu Ser Ala Val Ile Pro Asn Ala Phe				
		325		330
Arg Leu Val Lys Arg Lys Pro Pro Ser Phe Phe Gly Ala Ser Phe Leu				
		340		345
Met Gly Ser Leu Gly Gly Met Gly Tyr Phe Ala Tyr Trp Tyr Leu Lys				
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Lys Lys Tyr Ile				
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<210> 6301
 <211> 911
 <212> DNA
 <213> Homo sapiens

<400> 6301
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 120
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<400> 6302

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<211> 474

<212> PRT

<213> Homo sapiens

<400> 6306

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 Lys Leu His Glu Arg Lys Cys Glu Pro Ile Ile Met Thr Val Pro Arg
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 Lys Ser Asp Leu Phe Gln Asp Asp Leu Tyr Pro Asp Thr Ala Gly Pro
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 385 390 395 400
 Asp Leu Lys Val Val Lys Lys Asn Ile Leu Asp Ser Lys Pro Thr Ala
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 Asn Lys Lys Cys Asp Leu Ile Ser Ile Pro Lys Lys Thr Thr Asp Thr
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<210> 6307

<211> 2119

<212> DNA

<213> Homo sapiens

<400> 6307

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<213> Homo sapiens

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Val Asp Asp Met Leu Gln Glu Asn His Gln Arg Val Ser Ile Phe Phe
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<210> 6309

<211> 564

<212> DNA

<213> Homo sapiens

<400> 6309

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<212> PRT

<213> Homo sapiens

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What is claimed is:

1. An isolated nucleic acid molecule encoding a polypeptide comprising an amino acid sequence that is at least 85% identical to a polypeptide including an amino acid sequence selected from the group consisting of SEQ ID NO:2 n , wherein n is any integer 1-3161, or the complement thereof.
2. The isolated nucleic acid molecule of claim 1, said molecule hybridizing under stringent conditions to a nucleic acid sequence complementary to a nucleic acid molecule comprising the sequence of nucleotides selected from the group consisting of SEQ ID NO:2 n , wherein n is any integer 1-3161, or the complement thereof.
3. The isolated nucleic acid molecule of claim 1, said molecule encoding a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NO: 2 n , wherein n is any integer 1-3161, or an amino acid sequence comprising one or more conservative substitutions in the amino acid sequence selected from the group consisting of SEQ ID NO: 2 n .
4. The isolated nucleic acid molecule of claim 1, wherein said molecule encodes a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NO: 2 n , wherein n is any integer 1-3161.
5. The isolated nucleic acid molecule of claim 1, wherein said molecule comprises the sequence of nucleotides selected from the group consisting of SEQ ID NO:2 n -1, wherein n is any integer 1-3161, or the complement thereof.
6. An oligonucleotide less than 100 nucleotides in length and comprising at least contiguous nucleotides selected from the group consisting of SEQ ID NO:2 n -1, wherein n is any integer 1-3161, or the complement thereof.
7. A vector comprising the nucleic acid molecule of claim 1.

8. The vector of claim 7, wherein said vector is an expression vector.
9. A host cell comprising the isolated nucleic acid molecule of claim 1.
10. A substantially purified polypeptide comprising an amino acid sequence at least 80% identical to a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NO: 2*n*, wherein *n* is any integer 1-3161.
11. The polypeptide of claim 10, wherein said polypeptide comprises the amino acid sequence selected from the group consisting of SEQ ID NO: 2*n*, wherein *n* is any integer 1-3161.
12. An antibody that selectively binds to the polypeptide of claim 10.
13. A pharmaceutical composition comprising a therapeutically or prophylactically effective amount of a therapeutic selected from the group consisting of:
 - a) the nucleic acid of claim 1;
 - b) the polypeptide of claim 10; and
 - c) the antibody of claim 12;and a pharmaceutically acceptable carrier.
14. A kit comprising in one or more containers, a therapeutically or prophylactically effective amount of the pharmaceutical composition of claim 13.
15. A method of producing the polypeptide of claim 10, said method comprising culturing the host cell of claim 9 under conditions in which the nucleic acid molecule is expressed.
16. A method of detecting the presence of the polypeptide of claim 10 in a sample, comprising contacting the sample with a compound that selectively binds to said polypeptide under conditions allowing the formation of a complex between said polypeptide and said

compound, and detecting said complex, if present, thereby identifying said polypeptide in said sample.

17. A method of detecting the presence of a nucleic acid molecule of claim 1 in a sample, the method comprising contacting the sample with a nucleic acid probe or primer that selectively binds to the nucleic acid molecule and determining whether the nucleic acid probe or primer bound to the nucleic acid molecule of claim 1 is present in the sample.

18. A method for modulating the activity of the polypeptide of claim 10, the method comprising contacting a cell sample comprising the polypeptide of claim 10 with a compound that binds to said polypeptide in an amount sufficient to modulate the activity of the polypeptide.

19. The use of a therapeutic in the manufacture of a medicament for treating a syndrome associated with a ORFX-associated disorder, wherein said therapeutic is selected from the group consisting of:

- a) the nucleic acid of claim 1;
- b) the polypeptide of claim 10; and
- c) the antibody of claim 12.

20. A method for screening for a modulator of activity or of latency or predisposition to an ORFX-associated disorder, said method comprising:

- a) contacting a test compound with the polypeptide of claim 10; and
- b) determining if said test compound binds to said polypeptide,

wherein binding of said test compound to said polypeptide indicates the test compound is a modulator of activity or of latency or predisposition to an ORFX-associated disorder.

21. A method for screening for a modulator of activity or of latency or predisposition to an ORFX-associated disorder, said method comprising:

- a) administering a test compound to a test subject at an increased risk ORFX-associated disorder, wherein said test subject recombinantly expresses a polypeptide encoded by the nucleotide of claim 1;

- b) measuring expression the activity of said protein in said test subject;
- c) measuring the activity of said protein in a control subject that recombinantly expresses said protein and is not at increased risk for an ORFX-associated disorder; and
- d) comparing expression of said protein in said test subject and said control subject, wherein a change in the activity of said protein in said test subject relative to said control subject indicates the test compound is a modulator or of latency of predisposition to an ORFX-associated disorder.

22. The method of claim 20, wherein said test animal is a recombinant test animal that expresses a test protein transgene or expresses said transgene under the control of a promoter at an increased level relative to a wild-type test animal, and wherein said promoter is not the native gene promoter of said transgene.

23. A method for determining the presence of or predisposition to a disease associated with altered levels of a polypeptide of claim 11 in a subject, the method comprising:

- a) measuring the amount of the polypeptide in a sample from said subject; and
- b) comparing the amount of said polypeptide in step (a) to the amount of the polypeptide present in a control sample,

wherein an alteration in the level of the polypeptide in step (a) as compared to the control sample indicates the presence of or predisposition to a disease in said subject.

24. The method of claim 23, wherein said subject is a human.

25. A method for determining the presence of or predisposition to a disease associated with altered levels the nucleic acid molecule of claim 1 in a subject, the method comprising:

- a) measuring the amount of the nucleic acid in a sample from the mammalian subject; and
- b) comparing the amount of said nucleic acid in step (a) to the amount of the nucleic acid present in a control sample,

wherein an alteration in the level of the nucleic acid in step (a) as compared to the control sample indicates the presence of or predisposition to said disease in said subject.

26. The method of claim 25, wherein said subject is a human.

27. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject a polypeptide of claim 10 in an amount sufficient to alleviate or prevent said pathological condition.

28. The method of claim 27, wherein said subject is a human.

29. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject a nucleic acid molecule of claim 1 in an amount sufficient to alleviate or prevent said pathological condition.

30. The method of claim 29, wherein said subject is a human.

31. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject an antibody of claim 12 in an amount sufficient to alleviate or prevent said pathological condition.

32. The method of claim 31, wherein said subject is a human.